



# Intermittent Extract Ventilation



## Installation, maintenance & user manual

Applicable for the following AIRSTREAM XE+ models:

| <b>PRODUCT CODE</b> | <b>DESCRIPTION</b>   |
|---------------------|----------------------|
| AF 90-XEP-100       | airstream Xe+ 100    |
| AF 90-XEP-100T      | airstream Xe+ 100 T  |
| AF 90-XEP-100HT     | airstream Xe+ 100 HT |
| AF 90-XEP-150       | airstream Xe+ 150    |
| AF 90-XEP-150T      | airstream Xe+ 150 T  |
| AF 90-XEP-150HT     | airstream Xe+ 150 HT |

## airstream Xe+

Airstream Xe+ is an axial fan designed to ensure air extraction in small/medium-sized rooms such as bathrooms, toilets, and kitchens.

The unit can be installed on walls, ceilings or windows and is suitable for air discharge directly to the outside or using a short extract duct (less than 1.5m).

## Table of contents

|   |    |
|---|----|
| 1. WARNINGS AND PRECAUTIONS.....          | 3  |
| 1.1. Transport and storage .....          | 3  |
| 1.2. Installation .....                   | 3  |
| 1.3. Use .....                            | 3  |
| 1.4. Maintenance.....                     | 3  |
| 2. PRODUCT INFORMATION .....              | 4  |
| 2.1. General information .....            | 4  |
| 2.2. Technical specification .....        | 4  |
| 2.3. Versions.....                        | 4  |
| 2.4. Dimensions [mm] and Weight [kg]..... | 5  |
| 2.5. TRANSPORT AND STORAGE.....           | 6  |
| 3. INSTALLATION .....                     | 6  |
| 3.1. Unpacking .....                      | 6  |
| 3.2. Where to install .....               | 6  |
| 3.3. Mounting and electrical wiring ..... | 7  |
| 4. MAINTENANCE .....                      | 11 |
| 5. DISPOSAL AND RECYCLING .....           | 12 |
| 6. ErP DIRECTIVE 1253/2014 .....          | 13 |
| 7. CUSTOMER SUPPORT .....                 | 14 |

## 1. WARNINGS AND PRECAUTIONS

### WARNING

Read this manual carefully before using the product and keep it in a safe place for reference. This product has been constructed up to a required standard and in compliance with regulations relating to electrical equipment and must be installed by technically qualified personnel. The manufacturer assumes no responsibility for damage to persons or property resulting from failure to observe the regulations contained in this booklet.

### 1.1. Transport and storage

- Do not leave the device exposed to atmospheric agents (rain, sun, snow, etc.).

### 1.2. Installation

- After removing the product from its packaging, verify its conditions. Do not leave the packaging within reach of children or people with disabilities.
- The device should not be used as an activator for water heaters, stoves, etc., nor should it discharge into hot air/fume vent ducts deriving from any type of combustion unit or tumble dryer.
- If the environment in which the product is installed also houses a fuel-operating device (water heater, methane stove etc.) that is not a "sealed chamber" type, it is essential to ensure adequate air intake, to ensure good combustion and proper equipment operation.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid creating a hazard.
- The electrical system to which the device is connected must comply with local regulations.
- Before connecting the product to the power supply or the power outlet, ensure that:
  - the data plate (voltage and frequency) corresponds to those of the electrical mains.
  - the electrical power supply/socket is adequate for maximum device power.
- An omni polar switch should be incorporated in the fixed wiring, in accordance with the wiring rules, to provide a full disconnection under overvoltage category III conditions (contact opening distance equal to or greater than 3mm).
- Ensure adequate air infiltration into the room in compliance with existing regulations in order to ensure proper device operation.
- Install the product so that the impeller is not accessible from the air outlet side as verified by contact with the Test (test probe "B" of the norm EN61032) in compliance with the current safety regulations.

### 1.3. Use

- The device should not be used for applications other than those specified in this manual.
- This appliance can be used by children aged 8 years old and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.
- If any abnormalities in operation are detected, disconnect the device from the mains supply and contact a qualified technician immediately. Use original spare parts only for repairs.
- 
- Cleaning and user maintenance shall not be made by children without supervision.
- Do not touch the appliance with wet or damp hands/feet.
- The device is designed to intake clean air only, i.e. without grease, soot, chemical or corrosive agents, or flammable or explosive mixtures.
- Do not use the product in the presence of inflammable vapors, such as alcohol, insecticides, gasoline, etc.
- Do not obstruct ducts or grilles to ensure optimum air passage.
- Do not immerse the device or its parts in water or other liquids.
- Operating temperature: 0°C up to +50°C.

### 1.4. Maintenance

- Even if the mains supply to the unit has been disconnected there remains a risk of injury due to rotating parts that have not come to a complete standstill.
- Turn off the main switch whenever a malfunction is detected or when cleaning.
- Use original spare parts only for repairs.

## 2. PRODUCT INFORMATION

### 2.1. General information

Airstream Xe+ is an axial fan designed to ensure air extraction in small/medium-sized rooms such as bathrooms, toilets, and kitchens.

The unit can be installed on walls, ceilings or windows and is suitable for air discharge directly to the outside or using a short extract duct (less than 1.5m).

### 2.2. Technical specification

- Material: high quality, impact, and UV-resistant ABS. Colour RAL 9010.
- Design front cover removable for cleaning without the use of tools.
- Rear reinforcement ring to prevent spigot deformation during installation.
- High efficiency aerodynamic fan with “winglet” blades to optimize acoustics and efficiency.
- Single phase induction motor with integrated thermal protection.
- Motor mounted on high quality sleeve bearings.
- The fan is double insulated: no earth connection is required.
- Suitable for continuous or intermittent operation.
- IPX4 degree of protection.
- Power supply 220V to 240V~ 50/60Hz.

### 2.3. Versions

#### **STANDARD**

The fan is operated using a separate ON/OFF switch or via a light switch (fig. 13A).

#### **WITH TIMER (over-run)**

The fan is provided with a timer circuit which is adjustable within a range from 1 minute to 25 minutes via a dedicated trimmer (fig. 14B).

Operation: the unit should be connected according to the diagram in fig. 13B, after the light is switched on, the fan activates with a delay of max 1.5 seconds. After the light is switched off, the fan continues to function for a pre-set period.

#### **WITH HUMIDISTAT & TIMER**

The fan is equipped with a humidity detector and a timer. The humidity detector operating threshold is adjustable from 50% to 95% Relative Humidity. The timer is adjustable from aprox. 1 minute to 25 minutes via a corresponding trimmer (fig. 14C).

Turn the humidity detector trimmer completely clockwise and the humidistat function is deactivated.

**Automatic humidistat operation:** Connected according to the diagram in fig. 13C. When the percentage of Relative Humidity exceeds the pre-set threshold, the fan starts up automatically. When the percentage of Relative Humidity goes below the threshold; the fan continues to function for a pre-set period of time.

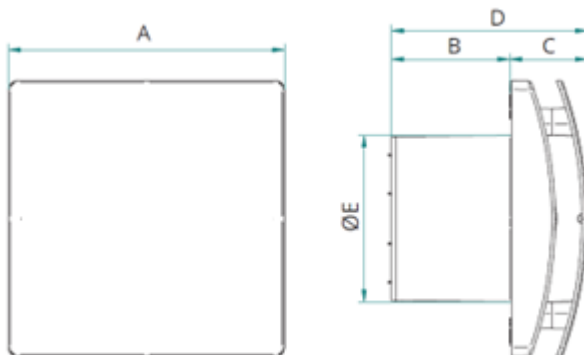
## Operation with switch connection:+

connected according to the diagram in fig. 13C. After the light is switched on, the fan activates with a delay of approx. 1.5 seconds. After it is switched off, the fan continues to function for a pre-set period.

**Attention:** When the relative humidity level is higher than the pre-set threshold, automatic operation with a humidistat has priority over manual operation, meaning that the fan cannot be stopped with a switch.

## 2.4. Dimensions [mm] and Weight [kg]

| Model             | Weight | A   | B  | C  | D   | E   |
|-------------------|--------|-----|----|----|-----|-----|
| airstream Xe+ 100 | 0.6 kg | 164 | 70 | 46 | 116 | 99  |
| airstream Xe+ 150 | 1.2 kg | 218 | 97 | 52 | 149 | 148 |



## 2.5. TRANSPORT AND STORAGE

### WARNING

Make sure that specific warnings in Chapter 2 are carefully read, understood, and applied!

The unit is delivered in one cardboard box.

The unit should be stored and transported in such a way that it is protected against physical damage.

It should be covered so that dust, rain, and snow cannot enter and damage the unit and its components.

## 3. INSTALLATION

### WARNING

Make sure that specific warnings and cautions in Chapter 2 are carefully read, understood, and applied!

This section describes how to install the unit correctly.

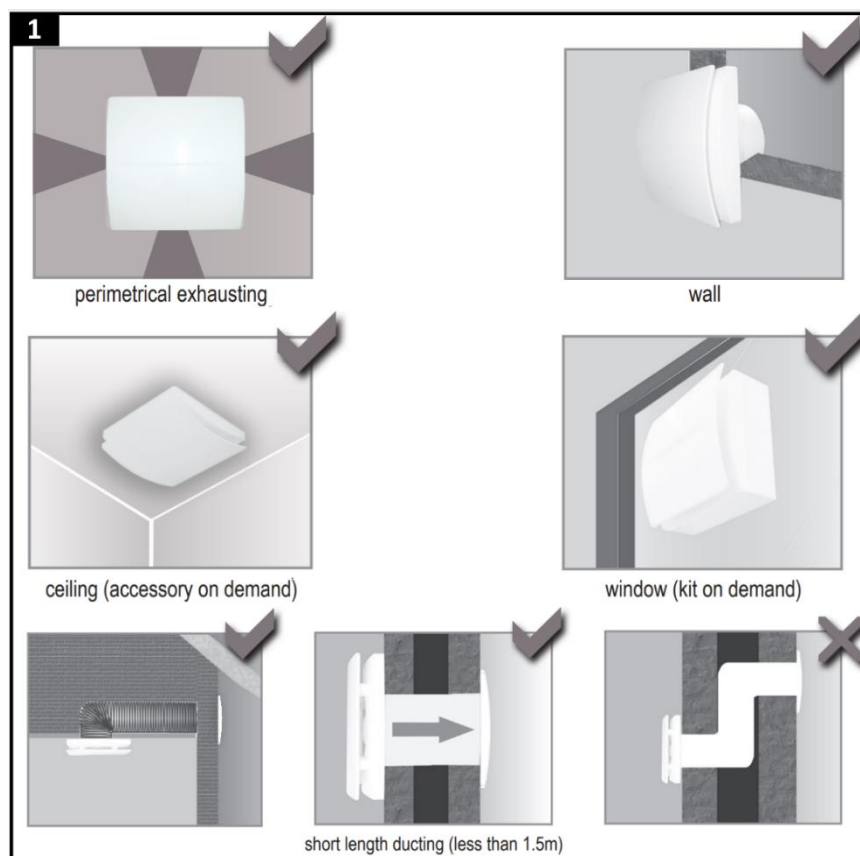
The unit must be installed according to these instructions.

### 3.1. Unpacking

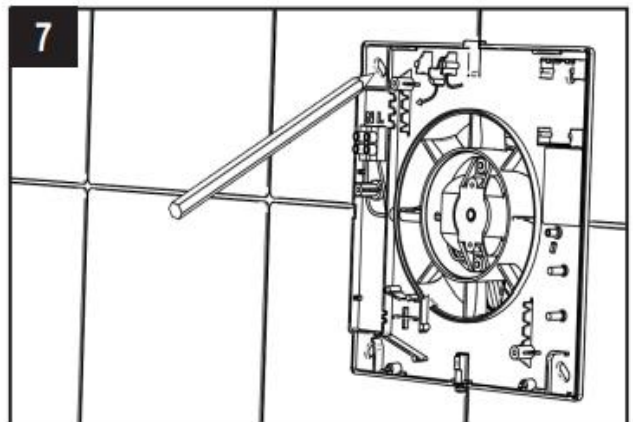
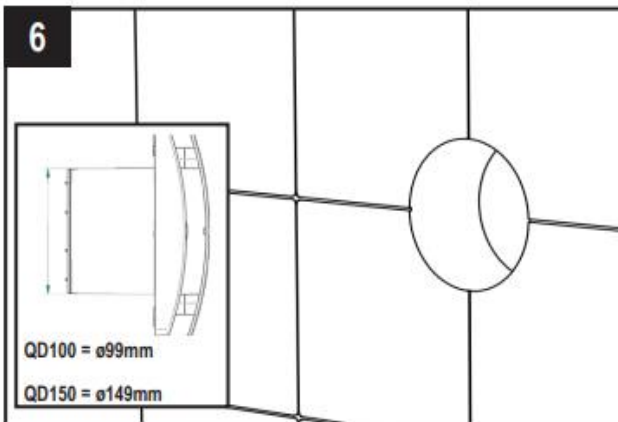
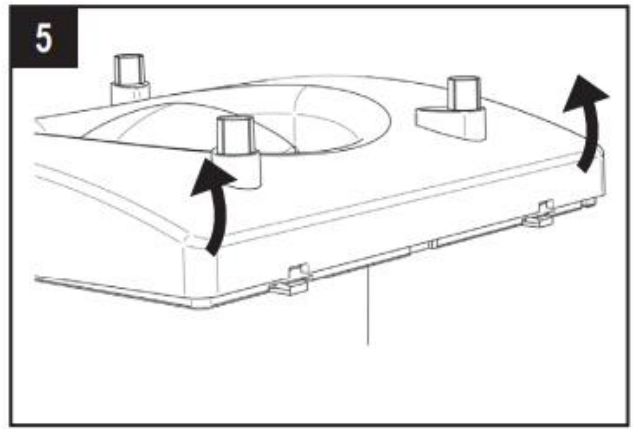
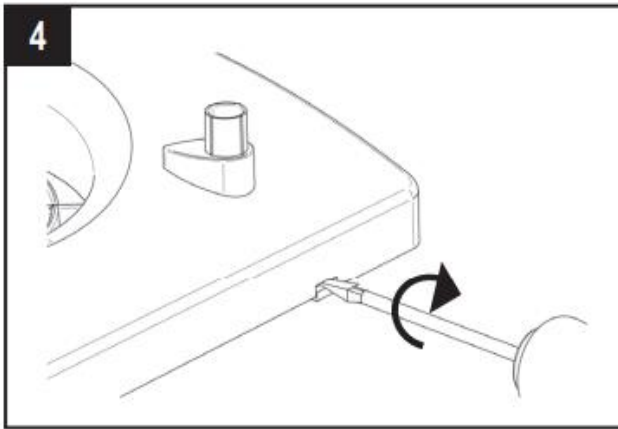
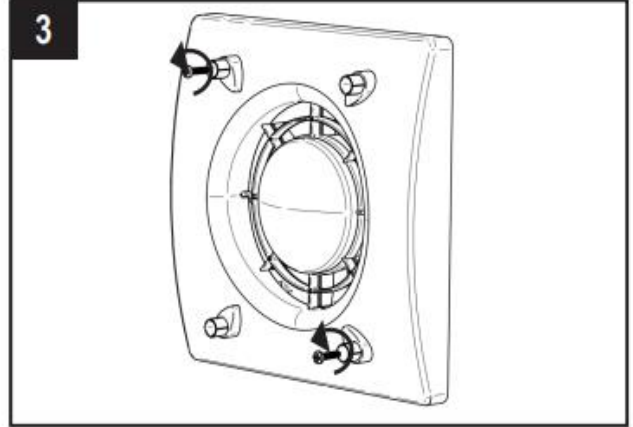
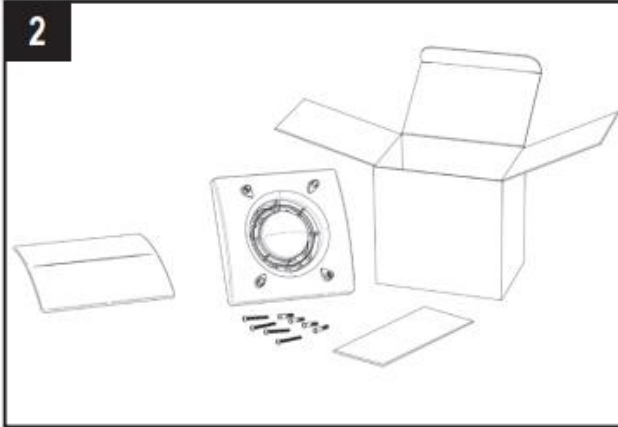
Verify that the unit (and accessories) delivered is according to order before starting the installation.

Any discrepancies from the ordered equipment must be reported to the supplier.

### 3.2. Where to install



## 3.3. Mounting and electrical wiring



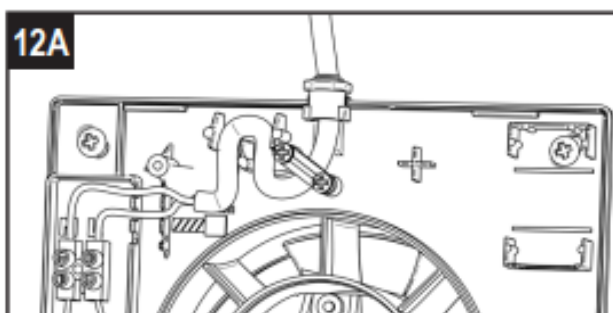
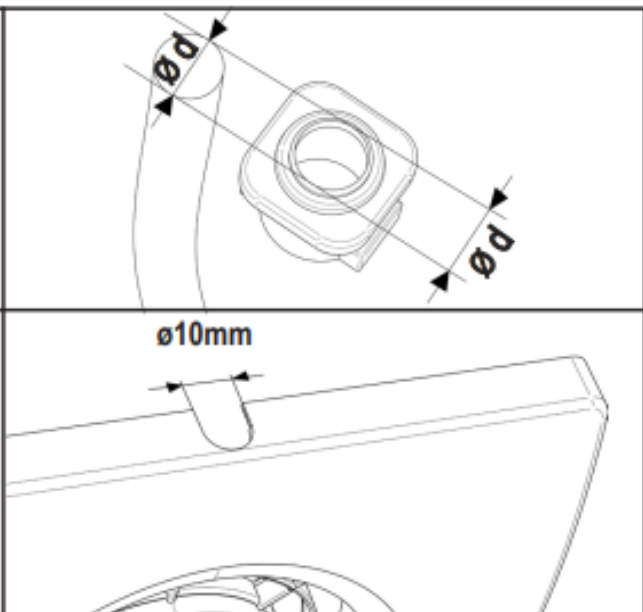
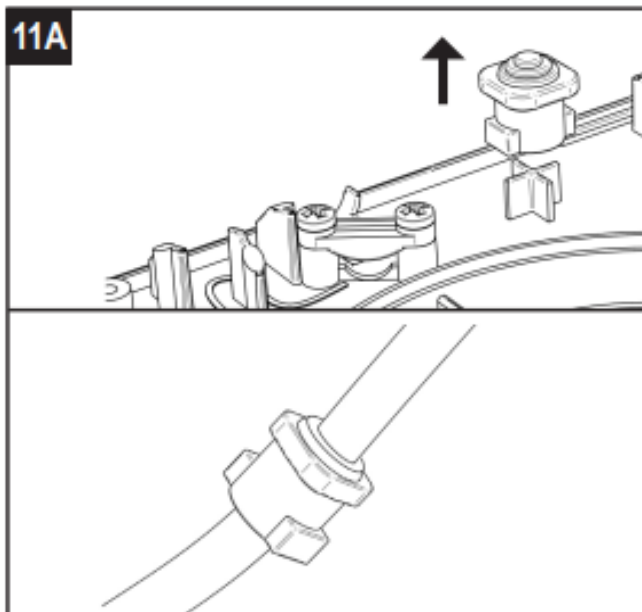
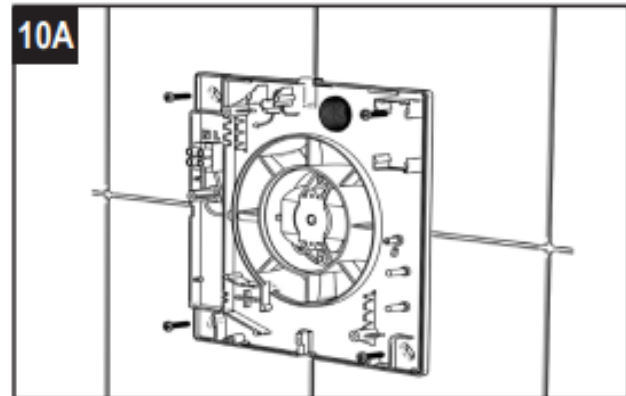
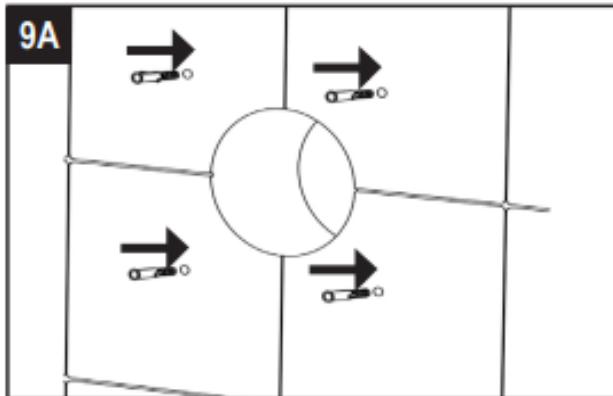
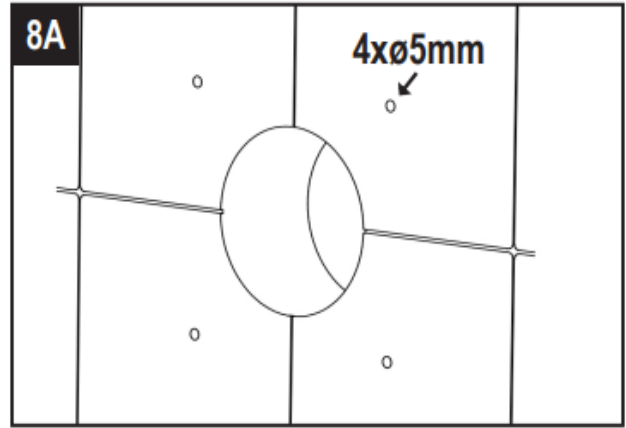
**A**

**SURFACE CABLE**

H03VV-F ; H05VV-F

BASE/STD  $\left\{ \begin{array}{l} 2 \times 0,5 \div 1,5 \text{mm}^2 \\ 3 \times 0,5 \div 1,5 \text{mm}^2 \end{array} \right.$

T-HT  $\left\{ \begin{array}{l} 3 \times 0,5 \div 1,5 \text{mm}^2 \\ 4 \times 0,5 \div 1 \text{mm}^2 \end{array} \right.$



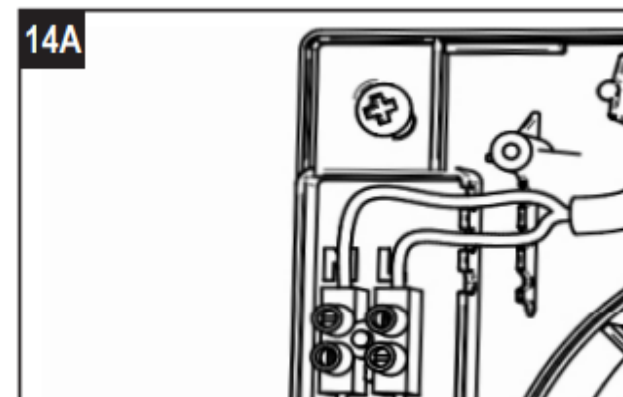
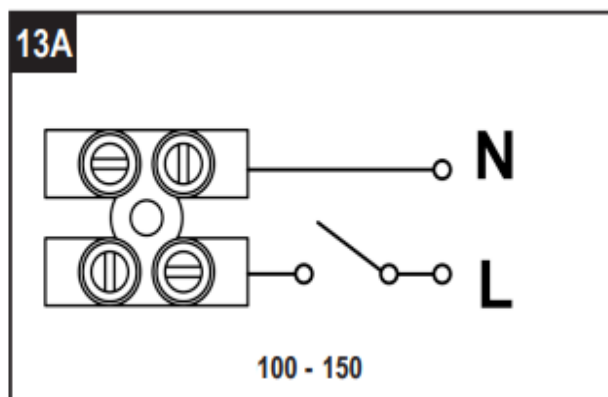
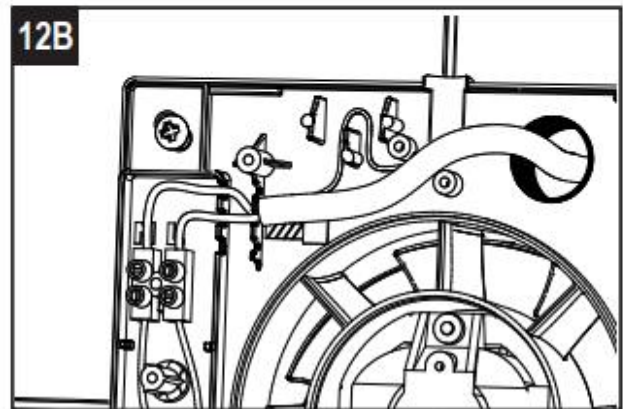
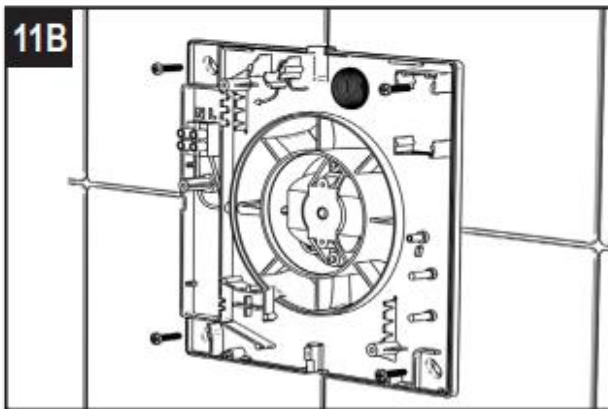
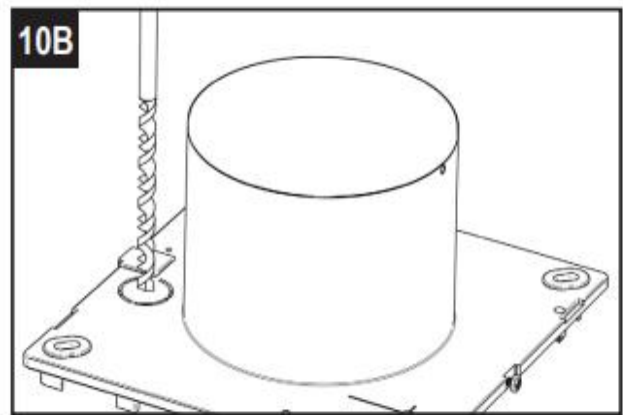
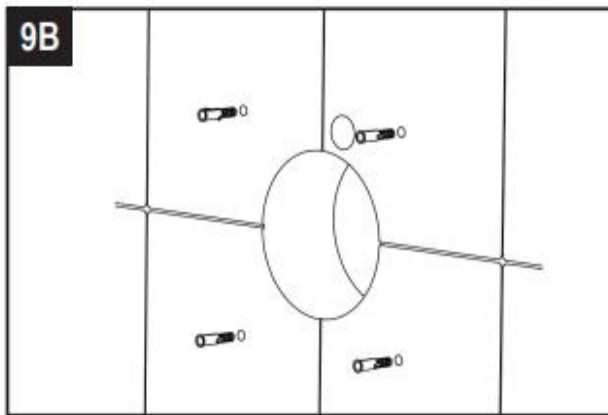
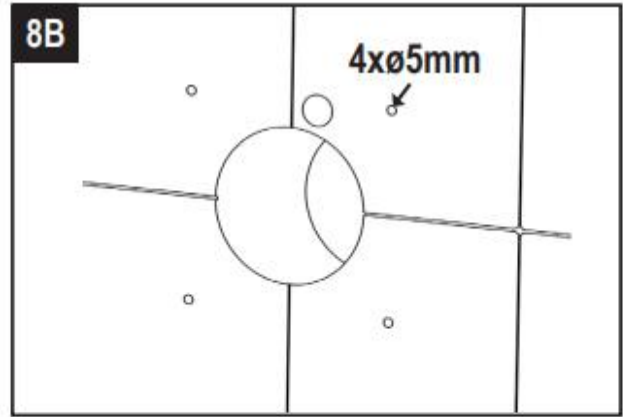


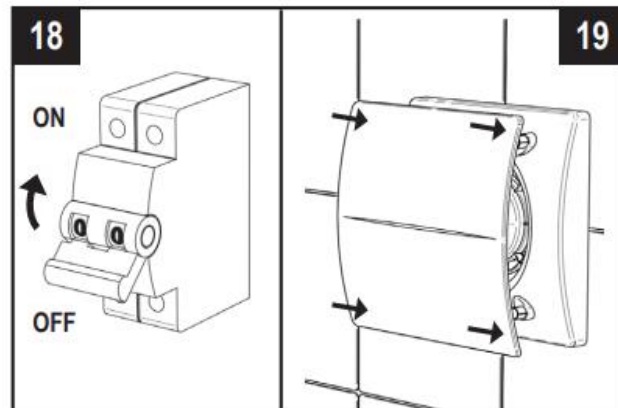
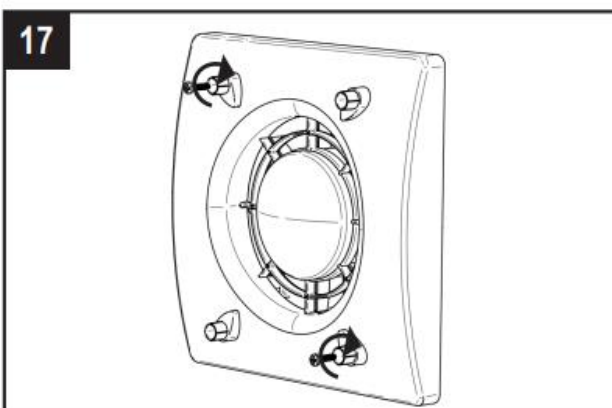
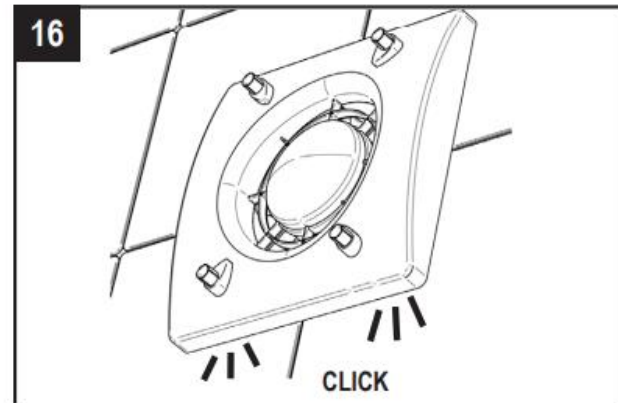
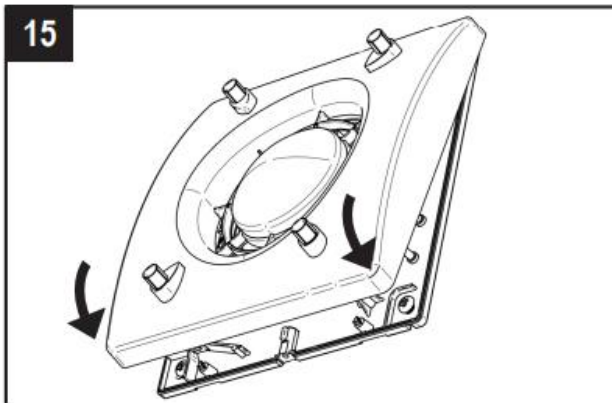
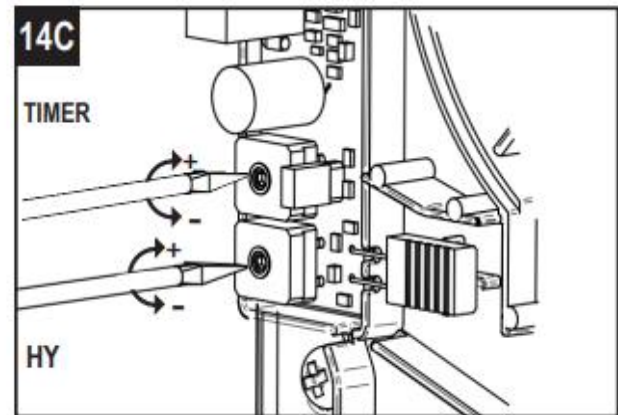
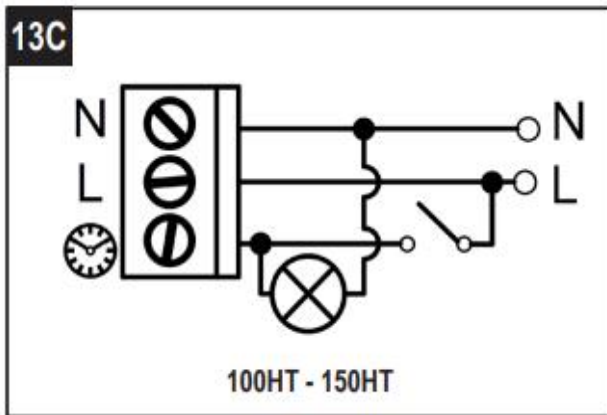
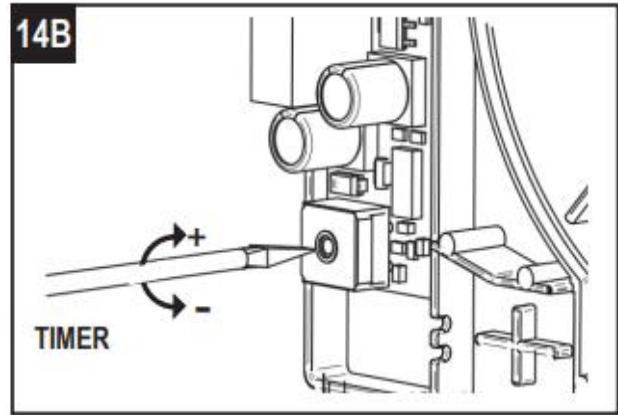
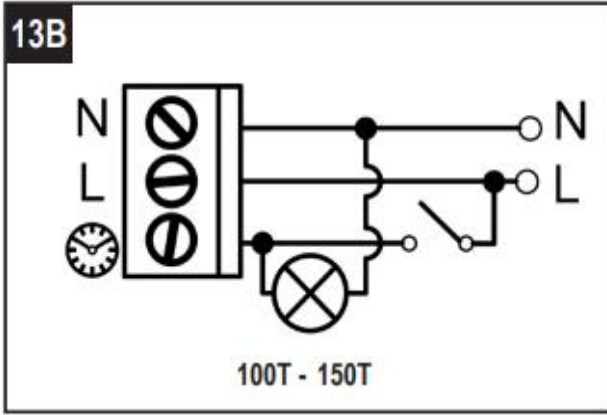
**RECESSED CABLE ENTRY** **B**

H03VV-F ; H05VV-F

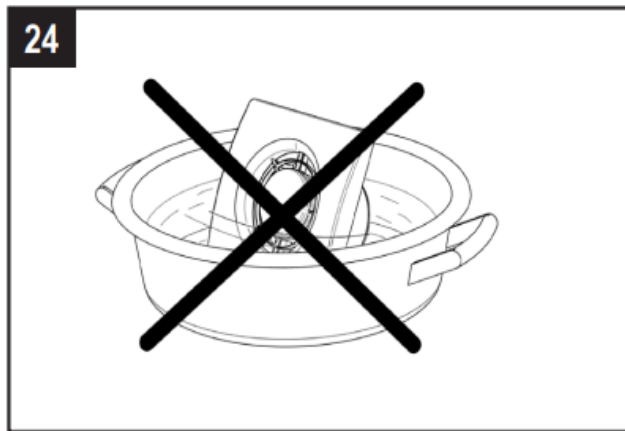
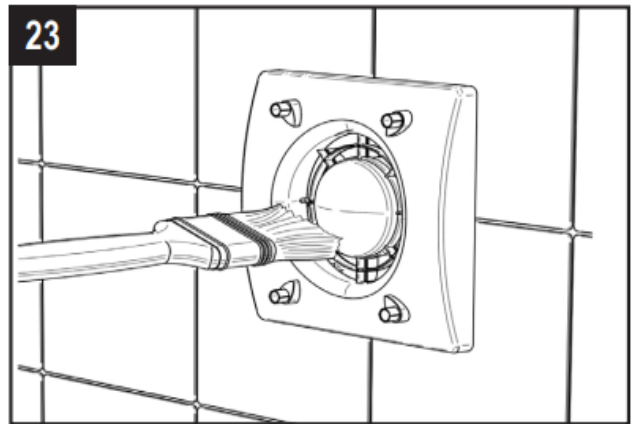
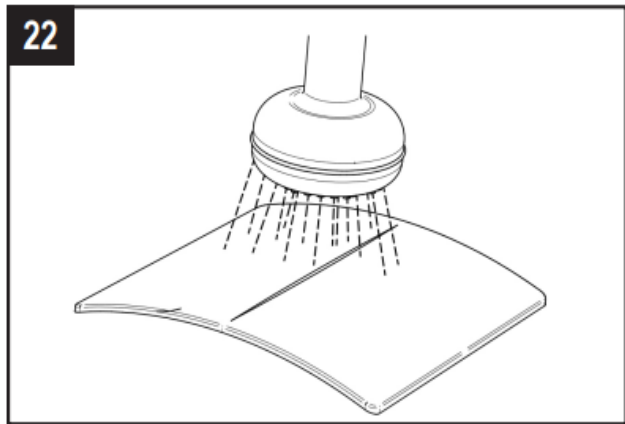
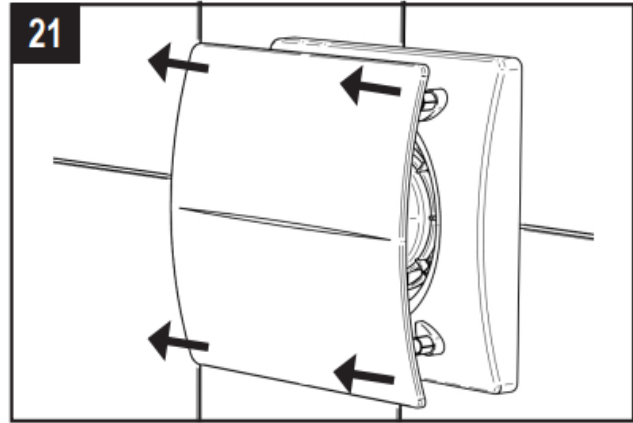
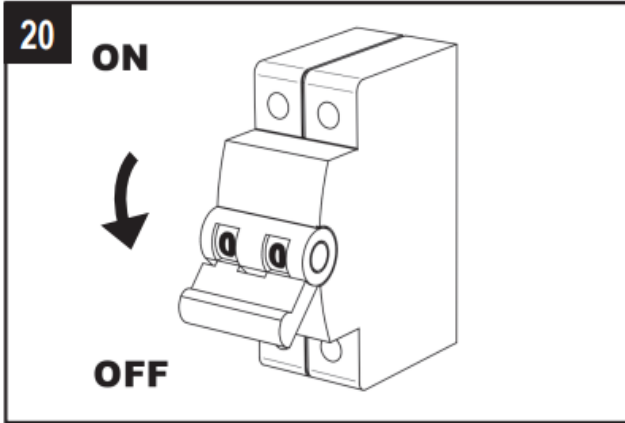
BASE/STD  $\left\{ \begin{array}{l} 2 \times 0,5 + 1,5 \text{mm}^2 \\ 3 \times 0,5 + 1,5 \text{mm}^2 \end{array} \right.$

T-HT  $\left\{ \begin{array}{l} 3 \times 0,5 + 1,5 \text{mm}^2 \\ 4 \times 0,5 + 1 \text{mm}^2 \end{array} \right.$

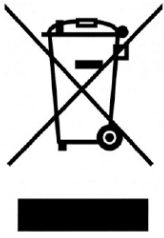




## 4. MAINTENANCE



## 5. DISPOSAL AND RECYCLING



Information on disposal of units at the end of life.

This product complies with EU Directive 2002/96/EC.

The symbol of the crossed-out dustbin indicates that this product must be collected separately from other waste at the end of its life. The user must, therefore, dispose of the product in question at suitable electronic and electro-technical waste disposal collection centres, or else send the product back to the retailer when purchasing a new, equivalent type device.

Separate collection of decommissioned equipment for recycling, treatment and environmentally compatible disposal helps to prevent negative effects on the environment and on health and promotes the recycling of the materials that make up the equipment.

Improper disposal of the product by the user may result in administrative sanctions as provided by law.

## 6. ErP DIRECTIVE 1253/2014

| a)  | Mark  | -        | Brookvent  |                         |  |                         |
|-----|---|----------|--|-------------------------|--|-------------------------|
| b)  | Model   | -        | airstream Xe 100<br>airstream Xe 100 T                       | airstream Xe 100 HT     | airstream Xe 150<br>airstream Xe 150 T | airstream Xe 150 HT     |
| c)  | SEC class   | -        | E  | C                       | E                                      | C                       |
| c1) | SEC warm climates                                 | kWh/m2.a | -2,9   | -9,6                    | -3                                     | -9,7                    |
| c2) | SEC average climates                              | kWh/m2.a | -10,5  | -24                     | -10,7                                  | -24,1                   |
| c3) | SEC cold climates                                 | kWh/m2.a | -23,9  | -49,1                   | -24                                    | -49,2                   |
|     | Energy label                                      | -        | No   |                         |  |                         |
| d)  | Unit typology                                     | -        | Residential - unidirectional                                 |                         |  |                         |
| e)  | Type of drive                                     | -        | Single speed drive   |                         |  |                         |
| f)  | Type of Heat Recovery System                      | -        | Absent   |                         |  |                         |
| g)  | Thermal efficiency of heat recovery               | %        | N/A  |                         |  |                         |
| h)  | Maximum flow rate                                 | m3/h     | 83   | 83                      | 253                                    | 253                     |
| i)  | Electric power input at maximum flow rate         | W        | 8,3  | 8,3                     | 24,2                                   | 24,2                    |
| j)  | Sound power level (Lwa)                           | dBA      | 47   | 47                      | 63                                     | 63                      |
| k)  | Reference flow rate                               | m3/h     | 83   | 83                      | 253                                    | 253                     |
| l)  | Reference pressure difference                     | Pa       | 10   | 10                      | 10                                     | 10                      |
| m)  | Specific power input (SPI)                        | W/m3/h   | 0,1  | 0,1                     | 0,096                                  | 0,096                   |
| n1) | Control factor                                    | -        | 1  | 0,65                    | 1                                      | 0,65                    |
| n2) | Control typology                                  | -        | Manual Control<br>(no DCV)                                   | Local Demand<br>Control | Manual Control<br>(no DCV)             | Local Demand<br>Control |
| o1) | Maximum internal leakage rate                     | %        | N/A  |                         |  |                         |
| o2) | Maximum external leakage rate                     | %        | N/A  |                         |  |                         |
| p1) | Internal mixing rate                              | %        | N/A  |                         |  |                         |
| p2) | External mixing rate                              | %        | N/A  |                         |  |                         |
| q)  | Visual filter warning                             | -        | N/A  |                         |  |                         |
| r)  | Instructions to install regulated grilles         | -        | check the instruction booklet                                |                         |  |                         |
| s)  | Internet address for pre/disassembly instructions | -        | <a href="http://www.brookvent.co.uk">www.brookvent.co.uk</a> |                         |  |                         |
| t)  | Airflow sensitivity to pressure variations        | %        | N/A  | N/A                     | 24                                     | 24                      |
| u)  | Indoor/outdoor air tightness                      | m3/h     | 52   | 52                      | 132                                    | 132                     |
| v1) | Annual electricity consumption- warm climates     | kWh      | 1,4  | 0,9                     | 1,3                                    | 0,9                     |
| v2) | Annual electricity consumption- average climates  | kWh      | 1,4  | 0,9                     | 1,3                                    | 0,9                     |
| v3) | Annual electricity consumption- cold climates     | kWh      | 1,4  | 0,9                     | 1,3                                    | 0,9                     |
| w1) | AHS - Annual heating saved - warm climates        | kWh      | 6,3  | 11,9                    | 6,3                                    | 11,9                    |
| w2) | AHS - Annual heating saved - average climates     | kWh      | 14   | 26,2                    | 14                                     | 26,2                    |
| w3) | AHS - Annual heating saved - cold climates        | kWh      | 27,3   | 51,3                    | 27,2                                   | 51,3                    |

## 7. CUSTOMER SUPPORT

At Brookvent we pride ourselves on providing Gold Standard after sales and support to all customers. Please feel free to contact one of our specialist team about any query you may have, and we will be more than happy to assist you.

Brookvent  
Brook House,  
Dunmurry Industrial Estate,  
Dunmurry,  
Belfast  
Northern Ireland, BT17 9HU

T: +44 (0) 28 9061 6505

---

It is important to retain this manual and make a copy available to any person using or working with (maintaining) the system.

Brookvent operate a policy of continuous innovation and improvement and thus reserve the right to alter product specifications and appearances without notice.