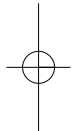
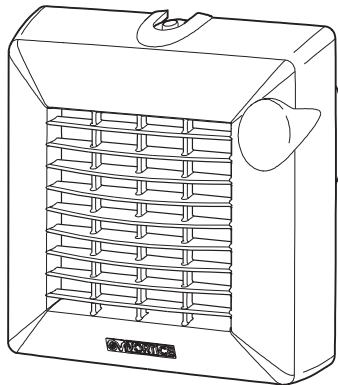


**Libretto d'istruzioni**  
**Instruction booklet**  
**Notice d'emploi et d'entretien**  
**Betriebsanleitung**  
**Manual de instrucciones**  
**Manual de instruções**  
**Gebruiksaanwijzing**  
**Instruktionshäfte**  
**Instrukcja obsługi**

**Használati utasítás**  
**Užívateľská príručka**  
**Manual de instrucțiuni**  
**Upute za uporabu**  
**Kullanma Kılavuzu**  
**Инструкции по эксплуатации**  
**Εγχειρίδιο οδηγιών**  
**كتيب التعليمات**  
**说明手册**



**PUNTO VORTICE**  
**M 90 - M 100 - M 120 - M 150 - M 100 12 V**



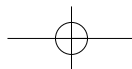
COD. 5.371.084.523

25/06/2008

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**Prima di installare e collegare il prodotto, leggere attentamente queste istruzioni. Vortice non potrà essere considerata responsabile per eventuali danni a persone o cose causate dal mancato rispetto delle prescrizioni di seguito elencate, la cui applicazione garantirà invece l'affidabile e sicuro funzionamento nel tempo dell'apparecchio. Conservare sempre questo libretto istruzioni.**

**Read these instructions carefully before installing and connecting this appliance. Vortice cannot assume any responsibility for damage to property or personal injury resulting from failure to abide by the following instructions, whose application will instead ensure safe and reliable operation of the appliance over time. Keep this instruction booklet in a safe place.**

**Avant d'installer et de brancher l'appareil, lire attentivement ces instructions. La société Vortice ne pourra être tenue pour responsable des dommages éventuels causés aux personnes ou aux choses, en cas d'un non-respect des consignes mentionnées dans cette notice, et dont l'application garantira au contraire le fonctionnement fiable et sûr dans le temps de l'appareil. Conserver toujours ce livret d'instructions.**

**Bevor Sie das Gerät installieren und anschließen, bitten Sie diese Gebrauchsanweisungen genau durchlesen. Vortice kann nicht für Personen- oder Sachschäden zur Verantwortung gezogen werden, die auf eine Nichtbeachtung der Hinweise in dieser Betriebsanleitung zurückzuführen sind. Damit die Lebensdauer und die elektrische und mechanische Zuverlässigkeit des Gerätes garantiert werden können, müssen alle Gebrauchsanweisungen befolgt werden. Diese Betriebsanleitung ist gut aufzubewahren.**

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## DESCRIPTION AND USE

## ENGLISH

The high-tech Vortice appliance you have purchased is an axial extractor fan designed to expel air from small and medium-sized rooms. The "LL" models have ball bearings that guarantee at least 30,000 hours of silent, trouble-free mechanical operation.

All the models have splash protection IPX4 and are thus ideal for installing in high-humidity environment.

Maximum performance and long product service life are ensured if the appliance is used correctly in compliance with the following instructions.



**Warning:** this symbol indicates precautions that must be taken to avoid injury

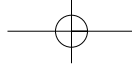
- Do not use this appliance for functions other than those described in this instruction booklet.
- After removing the appliance from its packaging, ensure that it is complete and undamaged. If in doubt contact a professionally qualified electrician or Vortice\*. Do not leave packaging within the reach of children or infirm persons.
- Certain fundamental rules must be observed when using any electrical appliance: a) never touch appliances with wet or damp hands; b) never touch appliances while barefoot; c) do not allow young children to touch and play with the appliance; d) supervise infirm persons when using the appliance.
- Store the appliance out of the reach of children and infirm persons if you decide to disconnect it from the power supply and no longer use it.
- Do not operate the appliance in the presence of inflammable vapours (alcohol, insecticides, petrol, etc.)
- Take all necessary precautions to ensure there are no back flows of gas into the room from open-flued combustion appliances.
- Do not allow young children or infirm persons to use the appliance without supervision.
- Supervise young children to ensure that they do not play with the appliance.



**Caution:** this symbol indicates precautions that must be taken to avoid damaging the appliance.

- Do not make modifications of any kind to this appliance.
- Do not expose this appliance to the weather (rain, sun, etc.)
- Regularly inspect the appliance for visible defects. If any faults are found, do not operate the appliance but contact Vortice\* immediately.
- If the appliance does not function correctly or develops a fault, contact Vortice\* immediately and ensure that only genuine original Vortice spares are used for any repairs.
- Should the appliance be dropped or suffer a heavy blow, have it checked immediately by Vortice\*.
- The appliance must be installed by a professionally qualified electrician.
- The electrical system to which the appliance is connected must conform to applicable standards.
- The appliance is double insulated and therefore does not need to be earthed.
- The electrical power supply/socket to which the appliance is to be connected must be able to provide the maximum electrical power required by the appliance. Otherwise contact an electrician to make the necessary modifications before proceeding.
- A multi-polar switch must be used to install the appliance. The gap between the switch contacts





- must be no less than 3 mm.
- Switch off the appliance at the installation's main switch: a) if the appliance does not function correctly; b) before cleaning the outside of the appliance; c) if the appliance is not to be used for any length of time.
- Connections not provided for by Vortice. In this configuration the appliance runs continuously (fig. 11A/1). In this configuration the appliance starts and stops automatically depending on the humidity level in the room in which it is located. Manual over-ride is not possible (fig. 11A/2).
- The room must have an adequate source of replacement air for this appliance to function effectively. Moreover, if there is any non-sealed combustion based appliance such as a water heater, gas stove, etc. in the same room, air replacement must be sufficient for all appliances to work effectively together.
- The appliance must either exhaust directly to the outside or into a short duct (max 400 mm in length to ensure certified performance). Efficiency losses will occur if the appliance is installed in ducting subject to any appreciable back pressure.
- The appliance cannot be used to control activation of water heaters, room heaters, etc. nor must it be connected to the hot air ducts used by

other appliances.

- The air to be extracted from the room must be clean (i.e. free of grease, soot, chemical and corrosive agents, and explosive or flammable mixtures) and must not exceed a temperature of 50°C (122°F).
- Keep the appliance's inlet and outlet grilles free to ensure an optimum flow of air.
- Install the appliance so that the impeller is inaccessible from the air outlet side as verified by contact with the Test Finger, in compliance with the current safety regulations. If this is not possible, the relevant protection accessory must be installed.

#### **N.B.**

**If the appliance is installed across a wall and wall tiling, to ensure correct operation a spacer must be fitted to compensate for any differences in the surface levels.**

**The appliance can also be installed on a ceiling. For ceiling mounting a special gasket contained in a kit to be ordered separately must be used in order to maintain a protection rating of IPX4. Do not install the appliance on a ceiling without first inserting the relevant gasket.**

\* (or an authorised Service Centre if you live outside the UK or Ireland)

## MODELS

EN

### **A. Vortice Punto STANDARD MODEL NORMAL/ AUTOMATIC**

This model is operated by switching it on by means of the power switch.

In the automatic version the closure vanes will open a few seconds after the unit is switched on.

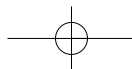
### **B. Vortice Punto TIMER NORMAL / AUTOMATIC**

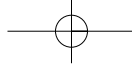
This model is equipped with a timer factory-set for a minimum operating time of 3 minutes. The timer may be set at between 3 and 20 minutes by

adjusting the trimmer (see fig. 13). The appliance switches on automatically a few seconds after the light is switched on and continues to run for the set time after the light is switched off.

### **C. Vortice Punto PIR NORMAL / AUTOMATIC**

This model is equipped with an electronic circuit and sensor that switches it on for a preset period of time adjustable from 3 to 20 minutes (see fig. 16) whenever it detects the presence of a person within its range of sensitivity.





**D. Vortice Punto Pull Cord NORMAL / AUTOMATIC**

This model is equipped with a pull-cord for switching it on and off manually.

**E. Vortice Punto T HCS NORMAL / AUTOMATIC**

This model has a preset humidity sensing circuit that switches it on when the relative humidity exceeds 65%. The circuit is also equipped with a timer that can be set at between 3 and 20 minutes by adjusting the trimmer (see fig. 14). The unit switches on automatically a few seconds after the light is switched on and continues to run for the preset period of time after the light is switched off.

**F. Vortice Punto MHC NORMAL / AUTOMATIC**

This model has an MHC microprocessor system for monitoring relative humidity. The unit is programmed so that it switches on when room temperature reaches 20°C and relative humidity

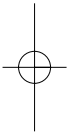
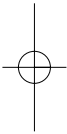
exceeds 65%. The microprocessor monitors room temperature and humidity constantly, calculating the average temperature over a 48 hour period. This procedure allows the microprocessor to set the optimum stop time automatically. This model is also equipped with a timer that can be set at between 3 and 20 minutes by adjusting the trimmer (see fig. 15).

**G. Vortice Punto 12 VOLT**

**NORMAL / AUTOMATIC**

**IMPORTANT: USE EXCLUSIVELY WITH A VORTICE 12V POWER SUPPLY UNIT**

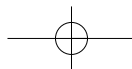
This model features Class III construction, i.e. electrical safety is based on the use of a safety low voltage power supply - a condition that is guaranteed only when the product is used in conjunction with VORTICE GA 12V - 12V T - 12V P - 12V MHC - 12V HCS power supply units.



| STANDARD |           |          | A              | B     | C   | D         | E     | F   | G    |
|----------|-----------|----------|----------------|-------|-----|-----------|-------|-----|------|
|          |           | DIAMETER | STANDARD MODEL | TIMER | PIR | PULL CORD | T HCS | MHC | 12 V |
|          | NORMAL    | Ø 90     | ●              | ●     |     |           |       |     |      |
|          |           | Ø 100    | ●              | ●     | ●   | ●         | ●     | ●   | ●    |
|          |           | Ø 120    | ●              | ●     | ●   | ●         | ●     | ●   | —    |
|          |           | Ø 150    | ●              | ●     | ●   | ●         | ●     | ●   | —    |
|          | AUTOMATIC | Ø 100    | ●              | ●     | ●   | ●         | ●     | ●   | ●    |
|          |           | Ø 120    | ●              | ●     | ●   | ●         | ●     | ●   | —    |
|          |           | Ø 150    | ●              | ●     | ●   | ●         | ●     | ●   | —    |

| LONG LIFE |           |          | A              | B     | C   | D         | E     | F   |
|-----------|-----------|----------|----------------|-------|-----|-----------|-------|-----|
|           |           | DIAMETER | STANDARD MODEL | TIMER | PIR | PULL CORD | T HCS | MHC |
| LONG LIFE | NORMAL    | Ø 100    | ●              | ●     | ●   | ●         | ●     | ●   |
|           |           | Ø 120    | ●              | ●     | ●   | ●         | ●     | ●   |
|           |           | Ø 150    | ●              | ●     | ●   | ●         | ●     | ●   |
|           | AUTOMATIC | Ø 100    | ●              | ●     | ●   | ●         | ●     | ●   |
| Ø 120     |           | ●        | ●              | ●     | ●   | ●         | ●     |     |
| Ø 150     |           | ●        | ●              | ●     | ●   | ●         | ●     |     |

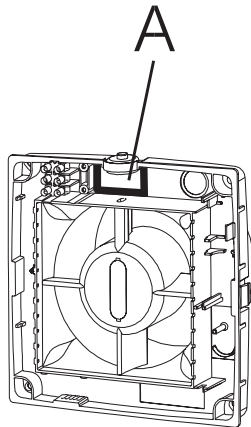
This is the complete range of Vortice Punto Models. Not all versions are available in all countries.



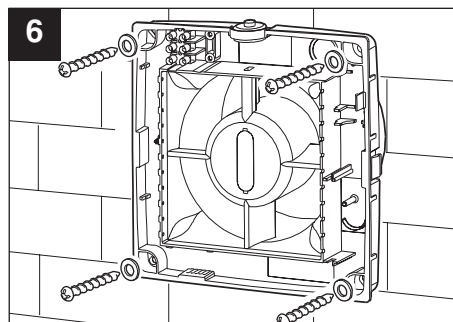
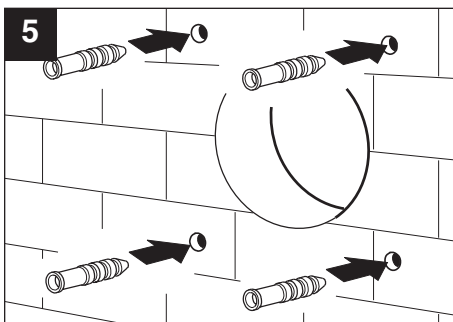
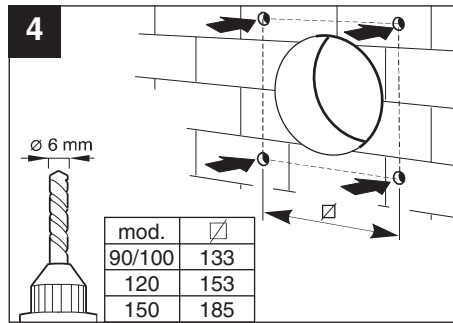
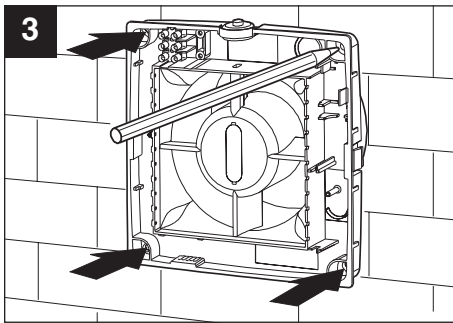
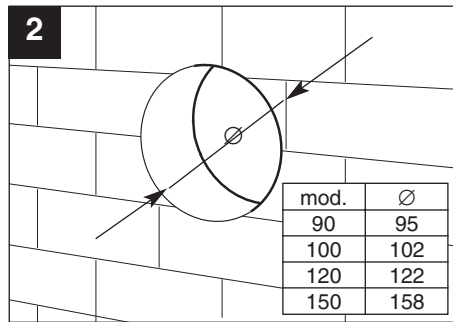
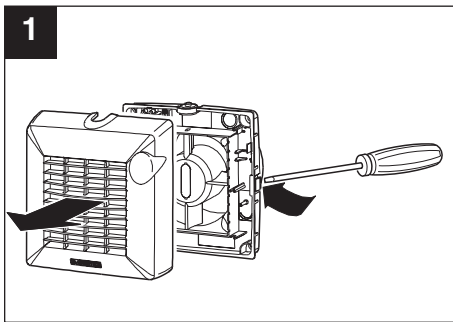
## INSTALLAZIONE - REGOLAZIONE TIMER

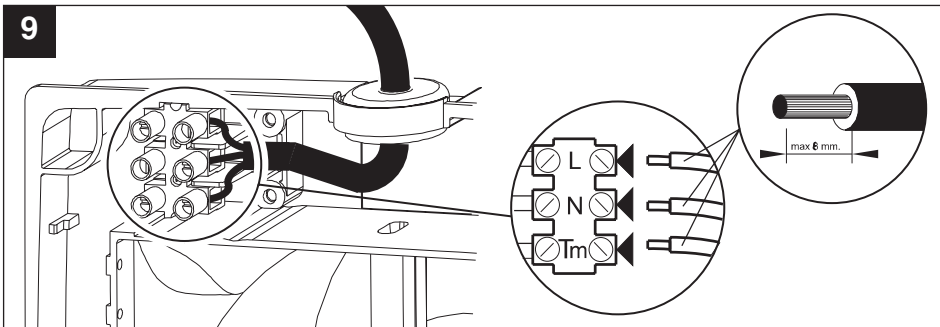
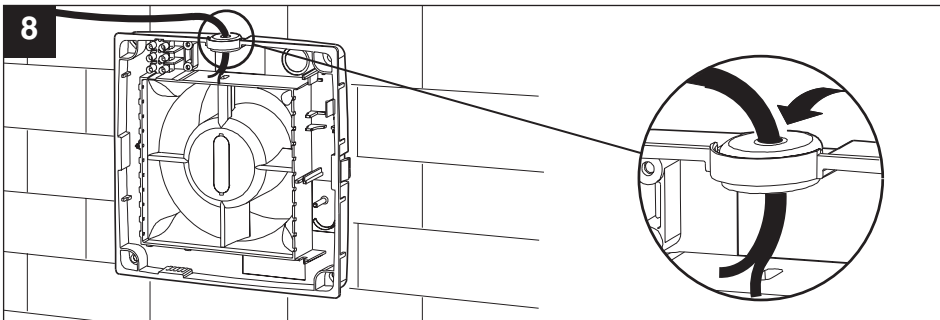
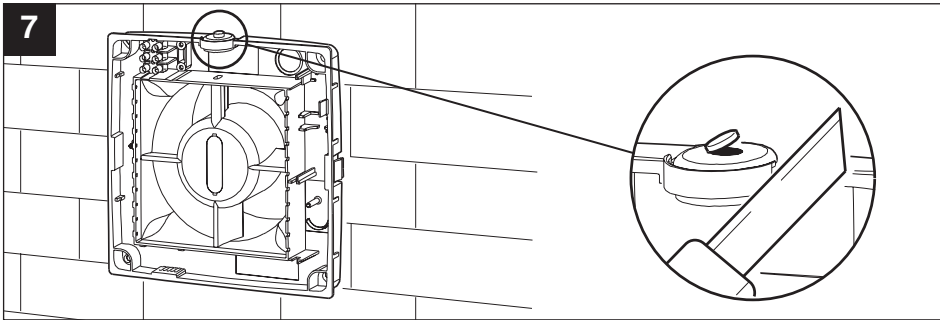
Installation - Adjusting the timer  
Installation - Réglage timer  
Installation - Einstellung des Timers  
Instalación - Regulación programador  
Instalação - Regulação do temporizador  
Installatie - Afstelling timer  
Installation - Reglering timer  
Instalacja - Regulacja timera  
Beszerelés - A timer beállítása

Instalace - Seřízení časového spínače  
Instalare - Reglare timer  
Postavljanje - Podešavanje timera  
Kurma - Timer ayarlama  
Установка - Настройка таймера  
Εγκατάσταση - Ρύθμιση χρονοδιακόπτη  
التركيب - ضبط المؤقت  
安装 - 定时器调节

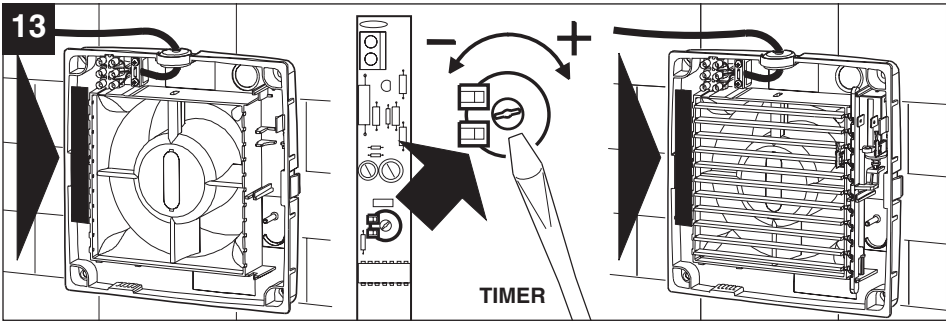
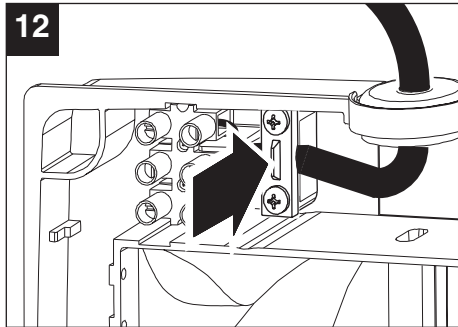
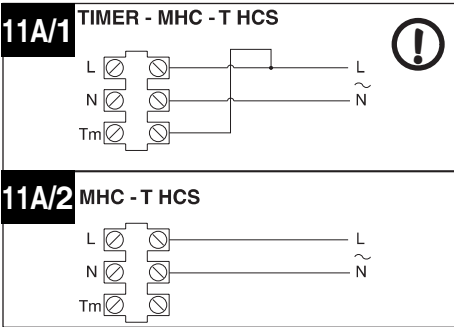
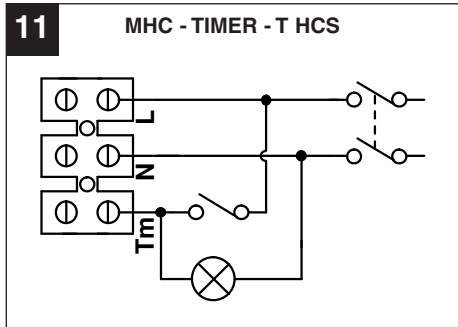
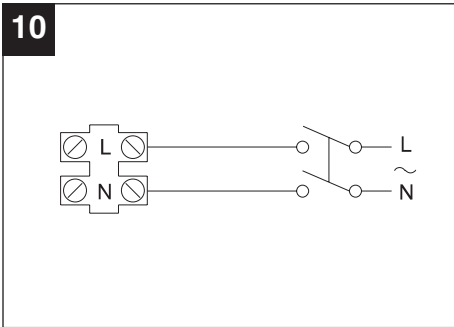


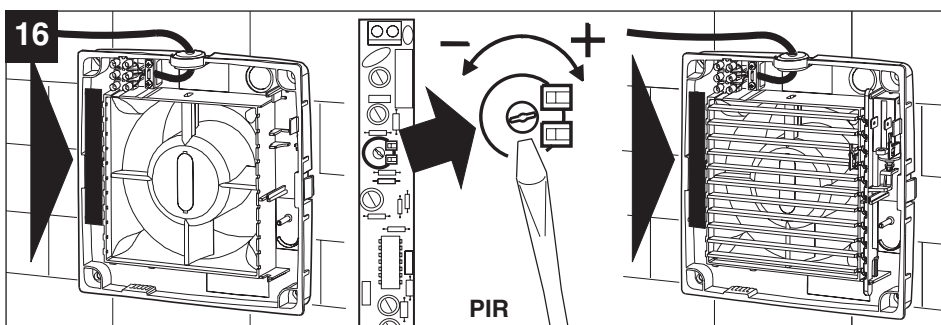
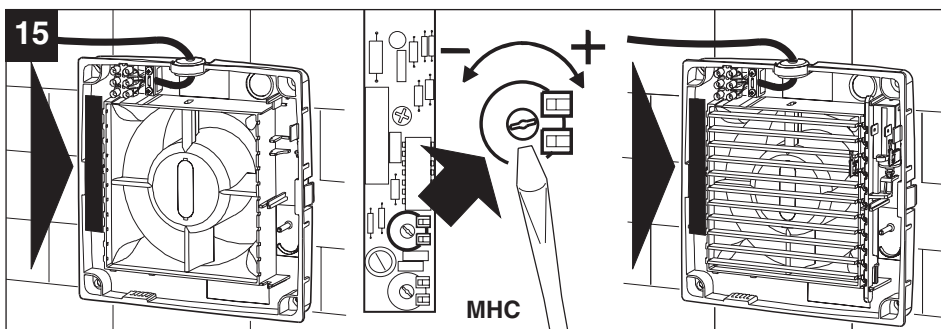
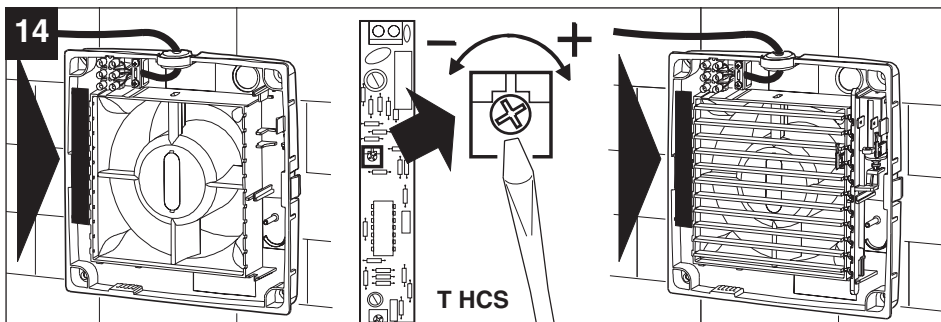
- I dati elettrici della rete devono corrispondere a quelli riportati in targa A.
- The power-source data must be consistent with the electrical data shown on the name plate A.
- Les informations électriques du réseau correspondent à celles qui sont reportées sur la plaque d'identification A.
- Die elektrischen daten des Stromnetzes müssen denen des Schildes A entsprechen.
- Los datos eléctricos de la red corresponden con los señalados en la placa de características eléctricas A
- Os dados eléctricos da rede devem corresponder aos mencionados na placa A.
- De gegevens van het elektriciteitsnet moeten overeenkomen met die van het elektriciteitsplaatje A
- Den aktuella nätspänningen skall motsvara de data som står på apparatens märkskylt figur A.
- Dane elektryczne sieci powinny odpowiadać danym podanym na tabliczce znamionowej A.
- Az elektromos hálózat adatai meg kell feleljenek az A adattáblán megadott adatoknak.
- Parametry elektrické sítě musí odpovídat údajům uvedeným na typovém štítku A.
- Parametrii electrici ai rețelei trebuie să corespundă cu cei de pe plăcuța A.
- Podaci električne mreže moraju odgovarati onima koji se navode na pločici A.
- Şebekenin elektrik verileri A plakasında belirtilenlere uymalıdır.
- Характеристики электрической сети должны соответствовать данным, приведенным на табличке A.
- Τα ηλεκτρικά χαρακτηριστικά του δικτύου πρέπει να αντιστοιχούν με εκείνα της πινακίδας A.
- البيانات الفنية لشبكة التيار الكهربائي يجب أن تكون مطابقة للبيانات المذكورة في لائحة البيانات A.
- 供电网络的电气数据必须与标牌A上指出的相符。

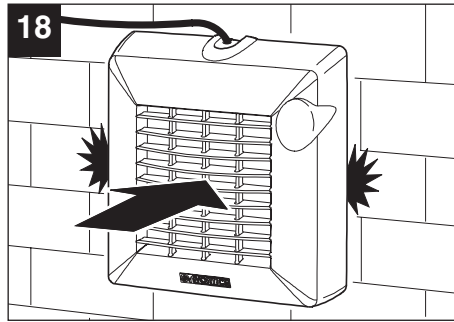
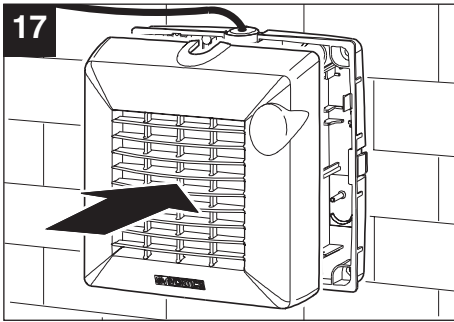








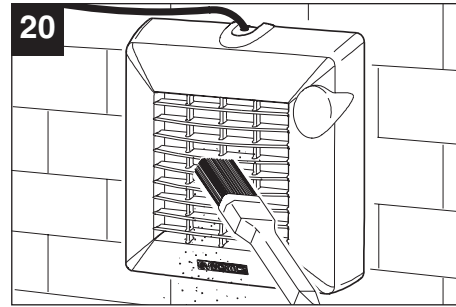
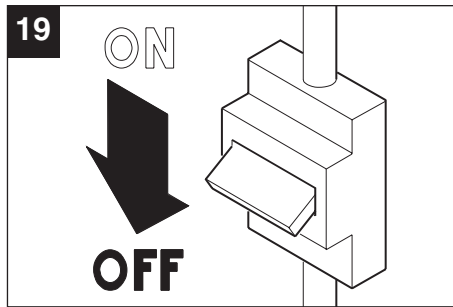




## MANUTENZIONE / PULIZIA

Maintenance / Cleaning  
Maintenance / Nettoyage  
Wartung / Reinigung  
Mantenimiento / Limpieza  
Manutenção / Limpeza  
Onderhoud / Reiniging  
Underhåll / Rengöring  
Konservacja / Czyszczenie  
Karbantartás / Tisztítás

Čištění / Údržba  
Întreținere / Curățare  
Održavanje / Čišćenje  
Bakım / Temizlik  
Техническое обслуживание / Чистка  
Συντήρηση / Καθαρισμός  
الصيانة/التنظيف  
保养/清洁



- La manutenzione e le attività di pulizia dell'apparecchio che ne richiedano lo smontaggio dovranno essere eseguite da personale qualificato.
- Maintenance and cleaning operations that require disassembly of the appliance must be carried out by a professionally qualified electrician. Before performing cleaning or maintenance operations, disconnect the device from the mains by turning off the main switch of the system (position OFF).
- La maintenance et les activités de nettoyage de l'appareil qui en exigent le démontage devront être effectuées par du personnel qualifié.
- Die Wartung und Reinigung des Gerätes, die eine Demontierung des Gerätes erfordern, dürfen nur durch Fachpersonal durchgeführt werden.
- El mantenimiento y las actividades de limpieza del aparato que requieran su desmontaje deben ser realizadas por personal cualificado.
- A manutenção e as actividades de limpeza do aparelho que requerem desmontagem deverão ser efectuadas por pessoal qualificado.
- Onderhouds- en reinigingswerkzaamheden waarvoor het apparaat gedemonteerd moet worden, mogen uitsluitend door vakkundig personeel worden uitgevoerd.
- Underhållet och rengöringen av apparaten som fordrar att den demonteras får endast utföras av auktoriserad personal.

- Konservacja oraz czynności czyszczenia urządzenia wymagające demontażu powinny być wykonywane przez wykwalifikowany personel.
- Azokat a karbantartási és tisztítási műveleteket, amelyekhez a berendezést szét kell szerelni, szakember kell, hogy végezze.
- Údržbu a čištění přístroje, při kterém je nutná jeho demontáž, smí provádět pouze kvalifikovaný pracovník.
- Operațiunile de întreținere și de curățare ale aparatului care necesită demontarea acestuia trebuie să fie executate de personal calificat.
- Održavanje i čišćenje uređaja koje zahtijeva razmontiranje mora izvršiti stručno osoblje.
- Cihazın demonte edilmesini gerektiren bakım ve temizlik işlemleri uzman personel tarafından gerçekleştirilmelidir.
- Операции по техническому обслуживанию и чистке прибора, требующие его демонтажа, должны выполняться квалифицированным персоналом.
- Η συντήρηση και οι ενέργειες καθαρισμού που απαιτούν την απουναρμόλογηση της συσκευής πρέπει να εκτελούνται από εξειδικευμένο προσωπικό.
- قبل القيام بأي عملية تنظيف أو صيانة، إفضل الجهاز عن شبكة التيار الكهربائي وذلك بقطع التيار عن الشبكة.
- 需要拆除部件的设备保养和清洁操作均必须由合格的人员进行。

## IT

**IN ALCUNI PAESI DELL'UNIONE EUROPEA QUESTO PRODOTTO NON RICADE NEL CAMPO DI APPLICAZIONE DELLA LEGGE NAZIONALE DI RECEPIMENTO DELLA DIRETTIVA RAEE E QUINDI NON È IN ESSI VIGENTE ALCUN OBBLIGO DI RACCOLTA DIFFERENZIATA A FINE VITA.**

### Attenzione

Questo prodotto è conforme alla Direttiva EU 2002/96/EC.

Il simbolo del cestino barrato riportato sull'apparecchio indica che il prodotto, alla fine della propria vita utile, dovendo essere trattato separatamente dai rifiuti domestici, deve essere conferito in un centro di raccolta differenziata per apparecchiature elettriche ed elettroniche oppure riconsegnato al rivenditore al momento dell'acquisto di una nuova apparecchiatura equivalente.



L'utente è responsabile del conferimento dell'apparecchio a fine vita alle appropriate strutture di raccolta, pena le sanzioni previste dalla vigente legislazione sui rifiuti.

L'adeguata raccolta differenziata per l'avvio successivo dell'apparecchio dismesso al riciclaggio, al trattamento e allo smaltimento ambientalmente compatibile contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il riciclo dei materiali di cui è composto il prodotto.

Per informazioni più dettagliate inerenti i sistemi di raccolta disponibili, rivolgersi al servizio locale di smaltimento rifiuti, o al negozio in cui è stato effettuato l'acquisto.

I produttori e gli importatori ottemperano alla loro responsabilità per il riciclaggio, il trattamento e lo smaltimento ambientalmente compatibile sia direttamente sia partecipando ad un sistema collettivo.

## EN

**IN CERTAIN EUROPEAN UNION COUNTRIES THIS PRODUCT DOES NOT FALL WITHIN THE REQUIREMENTS OF THE NATIONAL LAWS IMPLEMENTING THE WEEE DIRECTIVE, AND IN THESE COUNTRIES THE PRODUCT IS NOT SUBJECT TO SEPARATE DISPOSAL OPERATIONS AT THE END OF ITS WORKING LIFE.**

### Important

This product conforms to EU Directive 2002/96/EC.

This appliance bears the symbol of the barred waste bin. This indicates that, at the end of its useful life, it must not be disposed of as domestic waste, but must be taken to a collection centre for waste electrical and electronic equipment, or returned to a retailer on purchase of a replacement.



It is the user's responsibility to dispose of this appliance through the appropriate channels at the end of its useful life. Failure to do so may incur the penalties established by laws governing waste disposal.

Proper differential collection, and the subsequent recycling, processing and environmentally compatible disposal of waste equipment avoids unnecessary damage to the environment and possible related health risks, and also promotes recycling of the materials used in the appliance.

For further information on waste collection and disposal, contact your local waste disposal service, or the shop from which you purchased the appliance.

Manufacturers and importers fulfil their responsibilities for recycling, processing and environmentally compatible disposal either directly or by participating in collective systems.