

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

Kleenbox, HEPA filtration box



*Please read the instructions carefully before installation.
Give this manual to the end user.*

SECURITY ADVISE SYMBOLS



Attention, Danger, Safety Warning!



High voltage or electric current hazard!



Danger of injury!



*Attention! Do not stand under the load:
Heavy weight.*



*Attention! Wear protective glasses
UV-A: Ultraviolet radiation.*



Important information.

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INSTALLATION

HORIZONTAL

The horizontal models have four roof fixing points. Keep in mind to assure a minimum distance to open the service panel and to replace the filters. Depending on the model, this distance is 500mm (Kleenbox 46/46 and Kleenbox 46/76) or 800mm (Kleenbox 76/76).

VERTICAL

Maintain 300 mm free of obstructions in the inlet zone.

	<i>Assembly, connection and disconnection, electrical wiring and maintenance must be carried out exclusively by qualified personnel, observing these instructions and in accordance with the applicable standards. In case a special control is supplied, a specific manual is attached that must be used for its operation and installation.</i>
	<i>It is not necessary to remove the service panel to connect the equipment All the connections (power and control) and necessary fixings are external (on the lateral of the equipment). The equipment has a service panel to carry out repairs and replacements (see "REPAIRS" section).</i>

Power supply

HORIZONTAL

To connect the power supply on the horizontal model, the user should find a black connection box (placed on the lateral). Just connect single phase 230V to supply the fan.

VERTICAL

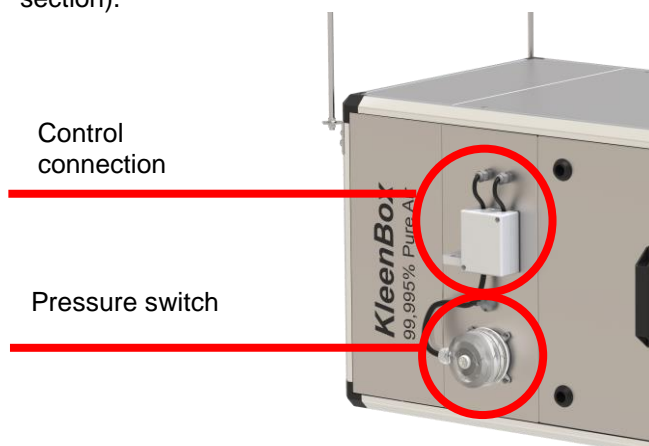
The vertical models include a plug&play wire which should be connected to the equipment and to a *Shucko* wall connector with electrical current.

Control

HORIZONTAL

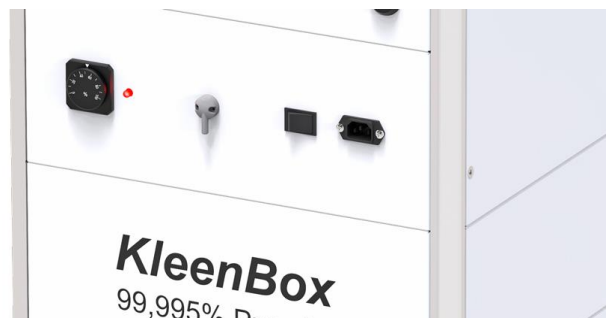
There is a white connection box placed on the lateral, next to the black power supply box. It is not needed to open the service panel to connect the control.

It is necessary to connect the fan 0-10V regulation and the dirty filter visual alarm (see wiring diagram section).



VERTICAL

For the vertical model, the control is inbuilt in the equipment and do not need any kind of installation.



Fixings

HORIZONTAL

Four fixing points placed on the four corners:



The moorings should be dimensioned according to the weight of each model (see technical data section). The installation can be done by threaded rods, tensioners or other supports not included.

VERTICAL

Four wheels to make easier the mobility. Two of them includes breaks which allow the fix the equipment and avoid the undesired displacements.



TRANSPORT AND STORAGE



Attention! Heavy product.

Do not stand under the suspended equipment during transport or assembly.

Store in a dry place protected from the elements. If the packaging is open, cover the purifier to protect it from dust. Do not step on or place heavy load on it to avoid damage to the material. Storage temperature between -20°C and +40°C.

When transporting the material, make sure that it is not damaged by the forklift (penetration of the fork in the packaging). The instructions on the packaging must be observed.

OPERATION INSTRUCTIONS

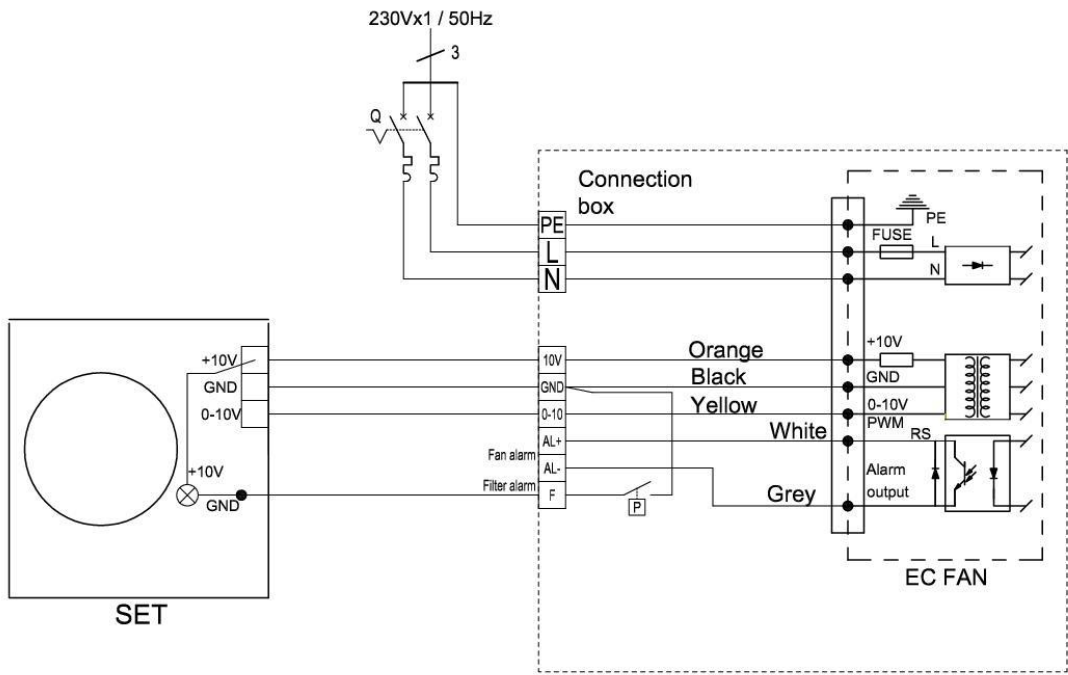
Control board features

- **ON/OFF:** Includes a switch which cuts the fan power supply and immediately stops the equipment.
- **Control 0-100%:** Includes a 0-10V potentiometer which allows to regulate fan speed from 0 to 100%.
- **Dirty filter visual alarm:** by using a led indicator, the equipment informs the user that filters are dirty and need to be replaced to keep the air clean.

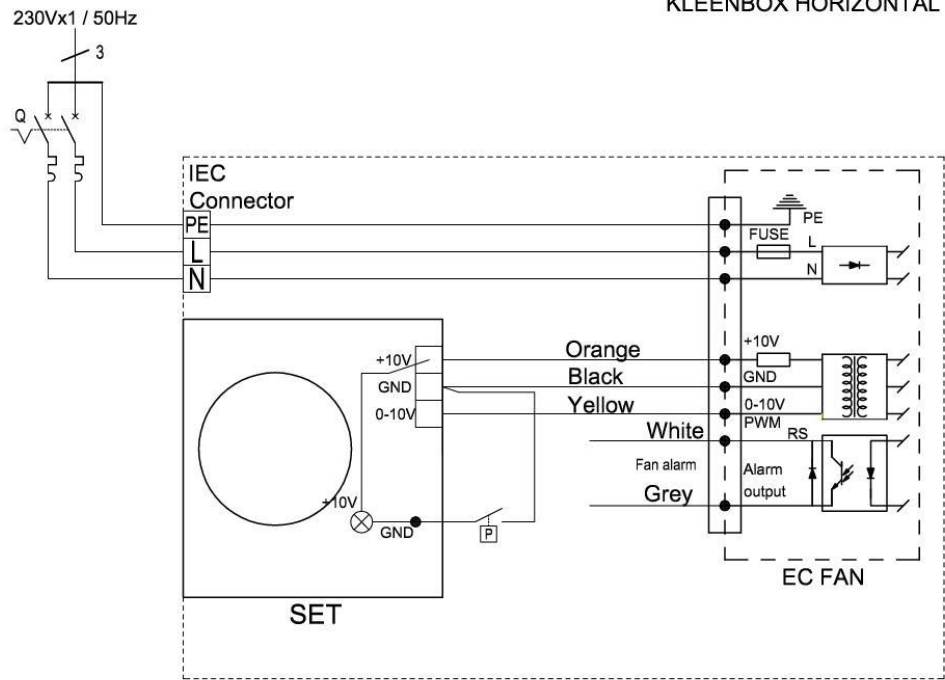
WIRING DIAGRAMS

The following diagrams are attached:

- Kleenbox horizontal and vertical. Diagram WELDOE07005



KLEENBOX HORIZONTAL



KLEENBOX VERTICAL

WIRING DIAGRAM KLEENBOX EC
ESQUEMAS ELÉCTRICOS KLEENBOX EC

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Doc. WELDOE07005
R0 - 21/12/20

KLEENBOX | High Efficiency Air Purifier Unit with Three Filtration Stages



Characteristics

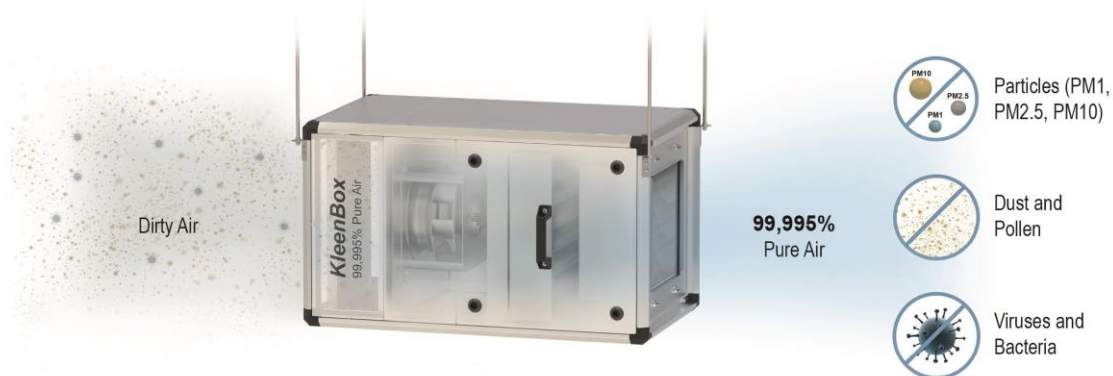
KleenBox
99,995% Pure Air



- High efficiency air filtration and purification unit with three filtration stages:
 - G4 (ZLM) pre-filter according to EN779 standard
 - F7 intermediate filter according to EN779 standard
 - H14 absolute filter with 99.995% efficiency according to EN1822 standard and sealed with polyurethane for 100% air filtration
- The continuous recirculation of the indoor air through the three filtration stages guarantees the purification of the air by eliminating particles and pollutants such as: dust, pollen, spores, bacteria, viruses and fine particles PM10, PM2.5 and PM1. Upon request, it can incorporate an activated carbon filter to eliminate gases and odours.
- Structure with soundproofed aluminum profile with galvanized steel sandwich panels with 25mm of fiberglass acoustic insulation and sound attenuator at the fan inlet that absorbs 55% of the noise according to EN12086 standard. Easy access service panel for filter replacement.
- Backward blade fan with high efficiency and very low consumption external rotor EC motor, electronically adjustable 0-100% via 0-10V.
- Mural regulator with ON / OFF switch, potentiometer for gradual stepless regulation of the air flow 0-100% and visual indicator for dirty filter alarm by differential pressure switch.
- Prepared for installation in ducts inside the false ceiling.

Specifications

Model	Airflow m³/h	Fan Power (230Vx1) W	Fan Current (230Vx1) A	Weight kg
KLEENBOX 46/46 EC	550	266	1,19	38
KLEENBOX 46/76 EC	650	266	1,19	45
KLEENBOX 76/76 EC	750	222	0,99	55



Absolute HEPA H14 filtration with G4 and F7 pre-filters



Boxes with 25mm thick fiberglass insulation

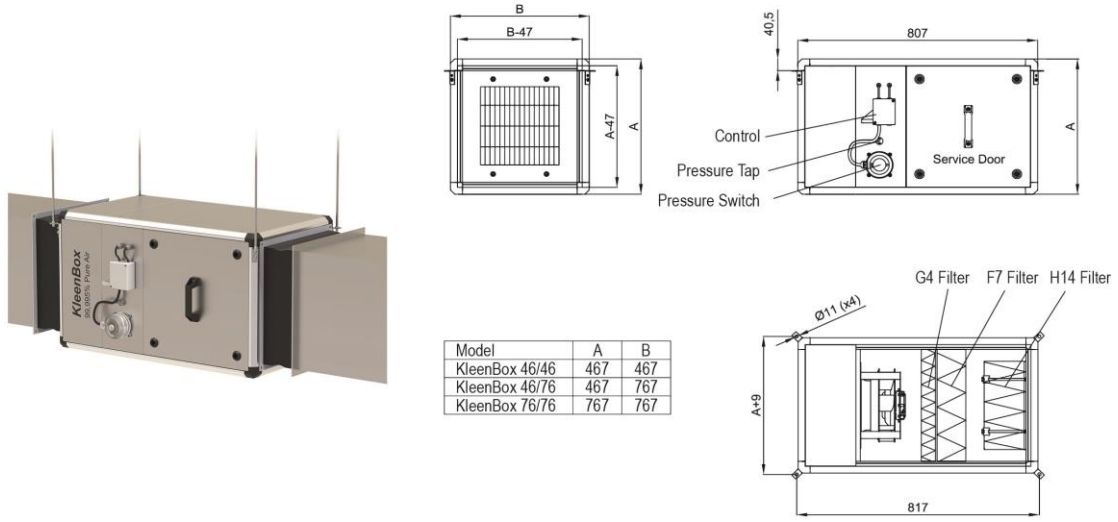


Potentiometer with ON / OFF switch



Dimensions

Ceiling installation with hanging brackets



Complete range to satisfy all requirements



Accessories



Safety Grille



Flexible Joint



Wheels



Characteristics

KleenBox
99,995% Pure Air



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 - G4 (ZLM) pre-filter according to EN779 standard
 - F7 intermediate filter according to EN779 standard
 - H14 absolute filter with 99.995% efficiency according to EN1822 standard and sealed with polyurethane for 100% air filtration
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- Backward blade fan with high efficiency and very low consumption external rotor EC motor, electronically adjustable 0-100% via 0-10V.
- ON / OFF switch, potentiometer for gradual stepless regulation of the air flow 0-100% and visual indicator for dirty filter alarm by differential pressure switch integrated in the equipment.
- 2 meter Plug & Play power cable.
- Plug & Play vertical unit with robust steel and silicone wheels with brake for easy movement and holding.

Specifications

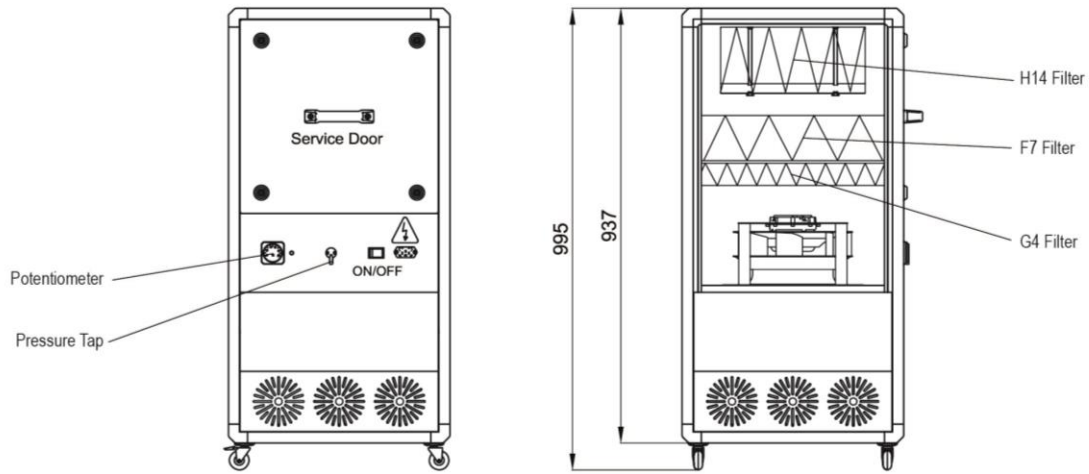
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99,995%
Pure Air

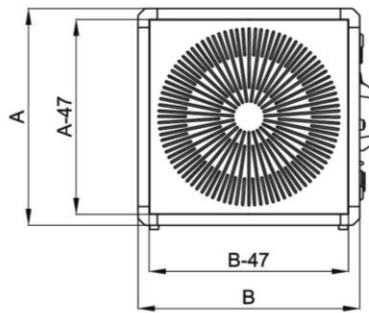
Absolute HEPA H14 filtration
with G4 and F7 pre-filters



Dimensions






Model	A	B
KleenBox 46/46	467	467
KleenBox 46/76	467	767
KleenBox 76/76	767	767



Complete range to satisfy all requirements



MAINTENANCE INSTRUCTIONS

	<i>For safety, before cleaning, turn off the appliance using the controller.</i>
	<i>It is forbidden to open the service panel (risk of electric shock and trapping in fans). Repairs must be carried out exclusively by authorized personnel.</i>
	<i>The inside of the appliance must not be cleaned with water or steam.</i>

Exterior cleaning

The Kleenbox HEPA filtration boxes do not need any kind of maintenance, except the housing cleaning for the vertical models.

It is recommended to clean the inlet grille once a month. To do that, is very important to shut down the equipment. If it keeps running, the fan could hover the wet dust causing damage to the rotor and covering the filters, reducing its lifetime.

Cleaning the body of the purifier should be done with a damp cloth and a conventional detergent. Do not use caustic or acid-containing detergents.




Internal cleaning

In models with perforated grille, it is advisable to clean the inside of the unit with a vacuum cleaner at least once every 2 years (*), better to do it before winter, using qualified personnel.

It is recommended to clean the inside of the equipment frequently with the help of a vacuum cleaner. (*)

(*) These periods are indicative depending on the conditions of each installation. In places with a high number of suspended particles it is desirable to increase the frequency of interior cleaning.

REPAIRS AND REEMPLACEMENTS

	<p><i>The assembly and the electrical connection must be carried out exclusively by specialized personnel and observing these instructions.</i></p> <p><i>Before carrying out any repairs, you must:</i></p> <ul style="list-style-type: none"> • <i>Notify staff and indicate that work is in progress.</i> • <i>Disconnect the power and protect the thermal magnet (so that no one can accidentally actuate it).</i> • <i>Make sure there is no voltage on the purifier.</i> • <i>Make sure that the fans have stopped.</i> • <i>Use only original spare parts.</i>
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To open the service panel, use the key included with the equipment. The service panel has four closing points that should be opened to take off the panel:



Once they are opened, take off the panel using the handle.

Filter replacements

Both models include a visual dirty filter alarm. When the led is turned ON, the H14 HEPA filter must be changed (the lifetime of HEPA filter is around 3.000 hours depending on the environment).

It is recommended to change the other two filters after:

- G4 → 500 working hours
- F7 → 1.500 working hours



The G4 and F7 filters can be removed by pulling them once the service panel is removed:



G4 Filter



F7 Filter

After removing the G4 and F7 filters, there is enough space to take off the H14 filter. This one is fixed to the housing by four wing nuts that should be untighten before remove the filter:



HEPA H14 Filter

To place the filters inside the equipment, follow the same steps but in reverse order: first, HEPA H14 filter, secondly, F7 filter; and, the last one, G4 filter. Finally, close the service panel and close it using the key.

Fan replacement

For the fan replacement open the service panel and remove all the filters to get more working space and avoid damages to them.

Straightaway, disconnect the fan wires. Depending on the model, we have:

Kleenbox Horizontal:

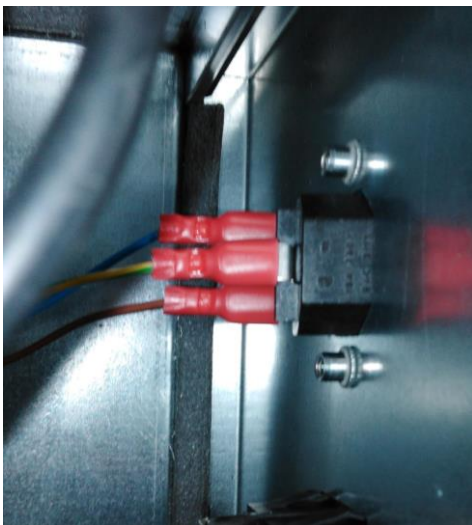


Pressure switch

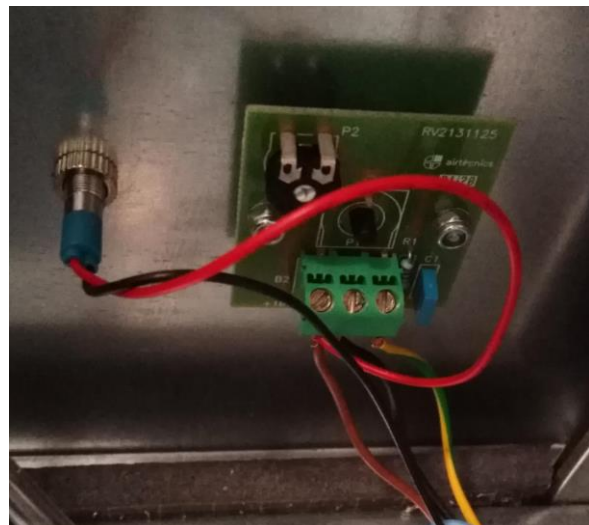


0-10V regulation white box (terminals)

Kleenbox Vertical:



Plug&Play connector (faston)



0-10V Inbuilt potentiometer (borna)

Finally, unscrew the fan fixation. It has four hexagonal screws:



To assemble the new fan, follow the same steps in reverse order.

ACCESSORIES

Optional accessories not included for the Kleenbox installation:



Protection panel for HEPA filter



Flexible joint for ducts

DECLARATION OF CONFORMITY



Declaration **CE** of conformity / Declaración **CE** de conformidad

Manufacturer **Motors i Ventiladors S.L. (AIRTÈCNICS)**
Fabricante **Conca de Barberà 6, Pol. Ind. Pla de la Bruguera**
08211 Castellar del Vallès (Barcelona) Spain

We declare, under our sole responsibility, that the product
Declaramos, bajo nuestra única responsabilidad, que el producto

Kleenbox: High efficiency air purifier unit with HEPA absolute filtration
Kleenbox: Unidad de purificación de aire de alta eficiencia con filtración absoluta HEPA

is/are developed, designed and manufactured in accordance with the following directive(s)
ha(n) sido desarrollado(s), diseñado(s) y fabricado(s) de acuerdo con la(s) siguiente(s) directiva(s)

Low Voltage Directive 2014/35/UE
Directiva Baja Tensión 2014/35/UE

Electromagnetic Compatibility Directive 2014/30/UE
Directiva Compatibilidad Electromagnética 2014/30/UE

Restriction Certain Hazardous Substances Directive 2011/65/EU (RoHS)
Directiva Restricción Substancias Peligrosas 2011/65/EU

Eco-design Energy-related Products Directive 2009/125/EC
Directiva Diseño Ecológico Productos Con Energía 2009/125/CE

applying the following harmonized standards in particular
aplicando las siguientes normas armonizadas en particular

LVD: EN 60335-1:2012 / AC:2014 / A11:2014 / A13:2017 / A:14:2020
EN 60335-2-30:2010 / A11:2012 / A1:2020

EMC: EN 61000-3-11:2002
EN 61000-3-12:2012
EN 55014-1:2017
EN 55014-2:2015

RoHS: EN 50581:2012

Date / Fecha
Name / Nombre
Position / Cargo

24/02/2021
Jordi Hierro
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 08211 Castellar del Vallès - BCN (SPAIN)
 MOTORS I VENTILADORS, S.L. Tel +34 93 7159988 www.airtecnics.com


Model: **AIRBOX 33/2-1462**
 Code: **AIRTA103040**
 Dimensions: **335x710x335**

Motor:
 Tension: 230 V
 Frequency: 50 Hz
 Intensity: 2,4 A
 Power: 0,54 kW
 Fan: 2x 2GDF35 133/190L L23-A6
 Speed: 1865 rpm
 Capacitor: 8 microF
 Air Volume: 1800 m3/h

Filter:
 Pre-Filter:
 Filter:

Customer: **ROSENBERG MIDDLE EAST FZC**
 Order nº: **2.436** Fab nº **EXVAI7** Serial nº: **1018 V 24.506**

CE Before use observe security rules and operating instructions!
 Avant la mise en service, observer les prescriptions de sécurité et le manuel d'utilisation !
 Antes de su puesta en marcha consultar el manual de instrucciones y normas de seguridad



AIRTA103040 024506

Purifier identification

All air purifiers are identified by a unique serial number printed on a label located on the inside of the service door. It also indicates the model of the purifier and its technical characteristics (flow, technical data of the fans).

It is essential to have this number to provide possible spare parts or technical information for the purifier in question.

In case you detect errors or ambiguities in this manual, we Will be happy to receive your *feedback*, it helps us to improve our documentation even more.

Airtècnics reserves the right to change any of the specifications in this manual.

GUARANTEE

Our warranty extends for one calendar year from the date of delivery. The guarantee is limited to repairing or replacing from our warehouse the that eventually suffer failures attributable to production defects. Installation costs are borne by the buyer. Products that, in our opinion, have been used improperly, handled incorrectly, improperly installed, connected to voltages other than the nominal, modified or repaired by unauthorized personnel, or that have suffered damage during transport, are excluded from any guarantee.

To validate the guarantee, it should be correctly filled and enclosed with the invoice that vouches for the buying date. If its manipulated, it will lose all validity.

It is the buyer's responsibility to take the necessary safety measures because in case of a failure or mistake in one of one our products, no damages to third parties, sets, installations, or people will occur.

✂ -----

Guarantee draft

Purifier data:

Model: Series number:
 Invoice date: Invoice number:

Buyer data:

Name:
 Address:
 Country: Phone: Fax:

Seller data:

Name:
 Address:
 Country: Phone: Fax:

Buyer signature and stamp

Seller signature and stamp