WE BET ON UVc TECHNOLOGY TO BEAT THE VIRUS

INTERNATIONAL IUVA ULTRAVIOLET ASSOCIATION

# AIR PURIFIERS

SODECA®

## Pure air for all aspects of your life

CE ACCORDING ErP

# SODECA manufactures air purifiers for residential, commercial, educational, industrial and hospitality applications.

Cleaning and purification is carried out by capturing particles with different stages of filtration and by treating the air using germicidal UVc chambers or ion plasma ultraviolet lamps, depending on the chosen model.

We are increasingly aware of the importance of breathing clean and pure air. Poor air quality significantly affects people's health and performance, with fatigue and respiratory problems being amongst the most common problems.

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This catalogue just details a small amount of what we can offer. Do not hesitate to contact us and we will put our experienced team at your disposal.

Sodeca air purifiers will accompany you during all the important stages of your life.

# I EXIST BECAUSE I BREATHE

# **GERMICIDAL CHAMBERS** WITH UV LIGHT ENDORSED BY ASHRAE AND BY IUVA

Germicidal chambers with UVc ultraviolet light are used together with other appropriate technologies to ensure that any pathogen that has not been captured by any preceding method such as filtration, is finally inactivated using UVc technology.

According to ASHRAE, irradiation uses UVc shortwave ultraviolet energy to inactivate viral, bacterial, and fungal organisms so that they cannot replicate and cause disease. UVc energy damages deoxyribonucleic acid (DNA) in a wide range of microorganisms, making them harmless. The standard UVc lamps in commercial systems are low-pressure mercury vapour lamps that primarily emit a virtually optimal UVc of 256nm to achieve a germicidal process on the through-air.

As concern about indoor air quality grows, UVc is increasingly being used to disrupt the transmission of pathogenic organisms such as mycobacterium tuberculosis (TB), influenza and mold viruses.
This is done by applying UVc to improve indoor air quality (IAQ) and consequently, improve health, comfort, and productivity

## INCREASE IN **PRODUCTIVITY AND CONCENTRATION**

In a professional workplace, increasingly high occupation rates means that regular ventilation is not enough to achieve good indoor air quality. It is necessary to complement ventilation with air purifiers to obtain an optimal, healthy environment of clean, pure air.

Studies show that the better the air quality, **the better our performance**, increasing the efficiency of our daily actions based on the improvement in blood oxygenation.

The International Ultraviolet Association (IUVA) endorses that UVc disinfection **technologies play an important role in the multiple processes used to reduce the transmission of the virus** that causes COVID-19, based on disinfection data and empirical evidence. UVc is a well-known disinfectant for air, water and surfaces which can help reduce the risk of COVID-19 contagion when applied correctly.

## UVc DOSE

Some examples of effective dosage for virus and bacteria inactivation

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For more information you can consult: **www.iuva.org**

| TYPE | NAME | INACTIVATION DOSE (mJ/cm²) 1ª (90%) | 2ª (99%) | REFERENCE |
|---|---|---|---|---|
| BACTERIA | Legionella pneumophila | 3,1 | 5,0 | Wilson et al. 1992 |
| | Salmonella enteritidis | 5,0 | 7,0 | Tosa and Hirata 1998 |
| | Salmonella typhimurium | 3,0 | 11,5 | Maya et al. 2003 |
| | Shigella dysenteriae | 0,5 | 2,0 | Wilson et al. 1992 |
| | Shigella sonnei | 3,2 | 4,9 | Chang et al. 1985 |
| | Vibrio cholerae | 0,8 | 1,4 | Wilson et al. 1992 |
| | Citrobacter diversus | 5,0 | 7,0 | Giese and Darby 2000 |
| | Mycobacterium tuberculosis | 2,2 | 4,3 | Collins 1971 |
| | Listeria monocytogenes | 2,2 | 3,0 | Collins 1971 |
| PROTOZOA | Cryptosporidium parvum | <2 | <2 | Clancy et al. 2004 |
| | Giardia lamblia | <10 | ~10 | Campbell et al. 2002 |
| | Giardia muris | <2 | <2 | Mofidi et al. 2002 |
| | Encephalitozoom intestinalis, microsporidia | 3,0 | 5,0 | Marshall et al. 2003 |
| VIRUS | Adenovirus 40 | 55,0 | 105,0 | Thurston-Enriquez et al. 2003 |
| | Echovirus II | 7,0 | 14,0 | Gerba et al. 2002 |
| | Hepatitis A | 5,1 | 13,7 | Wilson et al. 1992 |
| | Poliovirus Tipo 1 | 5,7 | 11,0 | Wilson et al. 1992 |
| | Rotavirus SA11 | 8,0 | 15,0 | Sommer et al. 1989 |

** Table according to IUVA (International UltraViolet Association)*

Based on evidence that UVc light has been used for 40 years to remove viruses and bacteria from wastewater and pharmaceuticals products, including Coronaviruses. Some viruses or bacteria may be more susceptible to UVc disinfection than others, but they can all be inactivated with appropriate doses.

**UVc light is used in hospital, medical and scientific techniques**, always making specific reference to UV Germicide (UVc of 200-280 nm) and that under controlled laboratory conditions has scientifically demonstrated that it inactivates two Coronaviruses close to SARS-CoV-2, such as SARS-CoV-1 and MERS-CoV.

## IMPROVE **HEALTH**

Most people spend 70% - 90% of their time being stuck inside, be it at work or at home. During this time we breathe an average of 20 to 25 Kg of air, the quality of which is vitally important to our body. **Breathing clean air reduces respiratory and fatigue problems.**

Good air quality improves health and improves mental and physical well-being, as well as increasing life expectancy.

# QUICK SELECTION TABLE

**AIRDOG**

| Model | m²* |
|---|---|
| X5 | 20-50 |
| X8 | 50-100 |

**SV/FILTER-CG**

F7 + F9

| Model | m²* |
|---|---|
| 200 | 20-50 |
| 250 | 50-100 |
| 315 | 50-140 |
| 350 | 100-140 |

**CJK/FILTER/EC**

F7 + F9

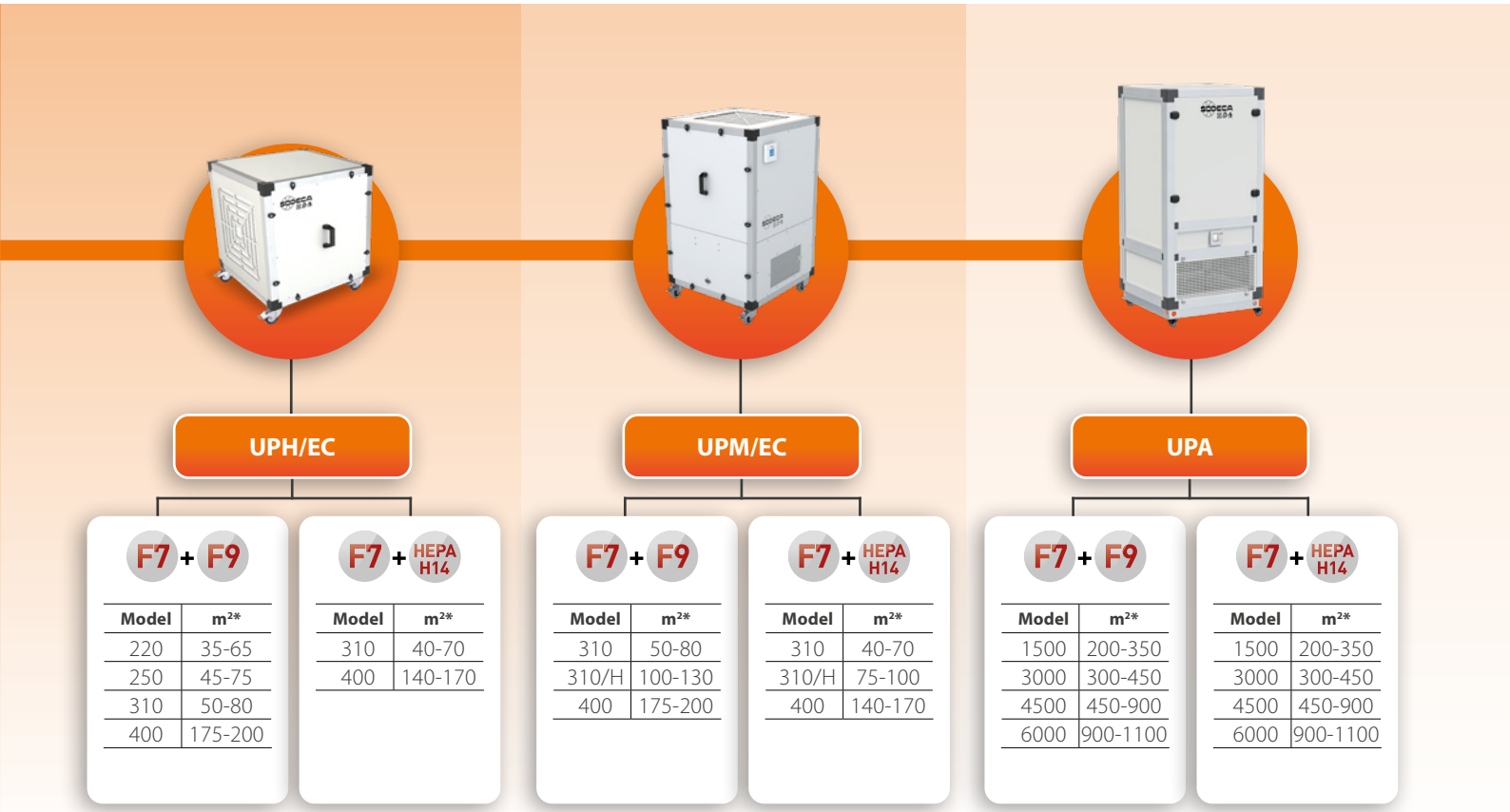
| Model | m²* |
|---|---|
| 220 | 35-65 |
| 250 | 45-75 |
| 310 | 50-80 |
| 400 | 175-200 |
| 500 | 255-285 |

F7 + HEPA H14

| Model | m²* |
|---|---|
| 310 | 40-70 |
| 400 | 140-170 |
| 500 | 215-245 |

* Recommended effective working area for a space 3 metres high.

- Hotels
- Manufacturing industry
- General warehouses
- Logistic warehouses
- Airport waiting rooms
- Hospital waiting rooms
- 4.0 technology industry
- Medical industry
- Pharmaceutical industry
- Laboratories
- Food industry
- Data centres
- Automotive industry



## UPH/EC

F7 + F9

| Model | m²* |
|---|---|
| 220 | 35-65 |
| 250 | 45-75 |
| 310 | 50-80 |
| 400 | 175-200 |

F7 + HEPA H14

| Model | m²* |
|---|---|
| 310 | 40-70 |
| 400 | 140-170 |

## UPM/EC

F7 + F9

| Model | m²* |
|---|---|
| 310 | 50-80 |
| 310/H | 100-130 |
| 400 | 175-200 |

F7 + HEPA H14

| Model | m²* |
|---|---|
| 310 | 40-70 |
| 310/H | 75-100 |
| 400 | 140-170 |

## UPA

F7 + F9

| Model | m²* |
|---|---|
| 1500 | 200-350 |
| 3000 | 300-450 |
| 4500 | 450-900 |
| 6000 | 900-1100 |

F7 + HEPA H14

| Model | m²* |
|---|---|
| 1500 | 200-350 |
| 3000 | 300-450 |
| 4500 | 450-900 |
| 6000 | 900-1100 |

# **FILTRATION** STAGES AND THEIR **EFFICIENCY**

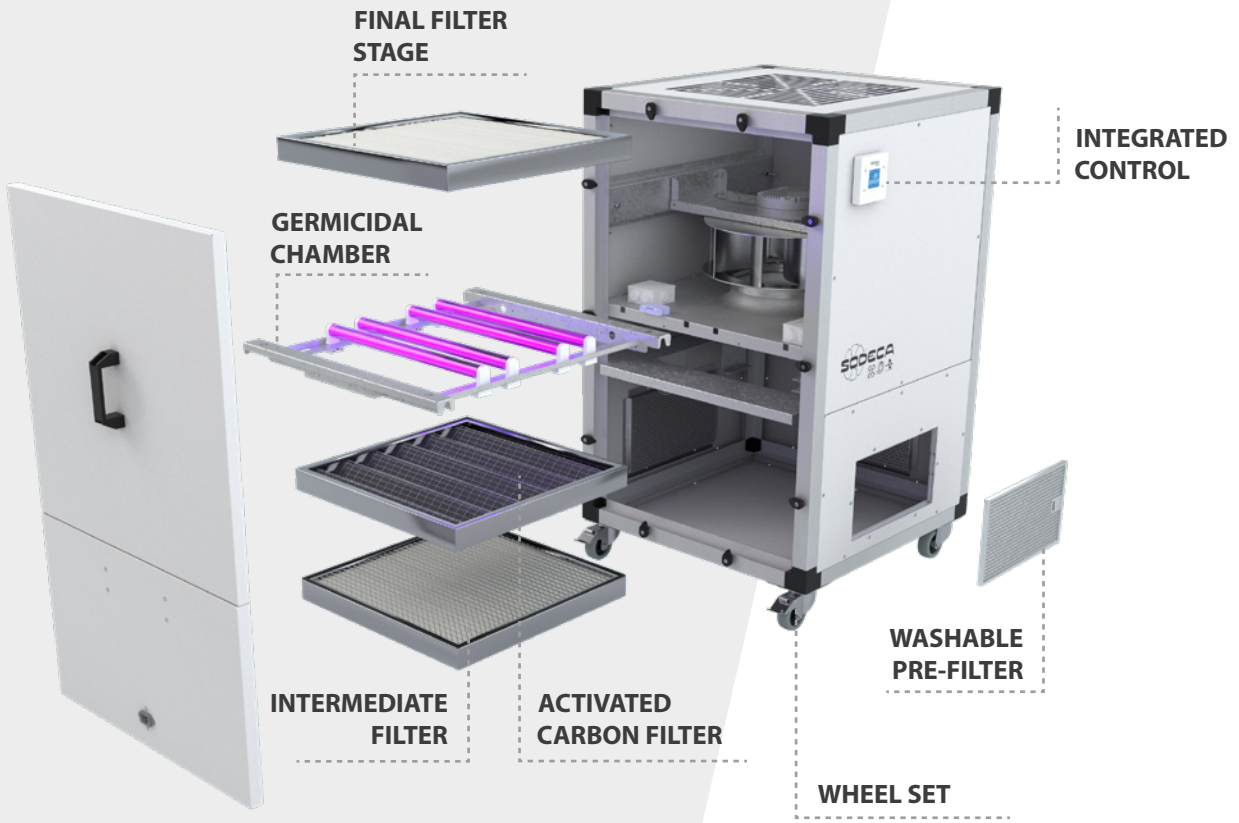
To maintain a good quality of indoor air, it is necessary to filter out particles that pollute the air, particularly the smallest particles, which are the most dangerous to health.

Air pollution in areas of high occupancy and mobility are contaminated by small particles and by gases from combustion engines. In addition, the presence of spores, mites and other bacteria or viruses can also have an adverse effect on health if they are not eliminated from the air that we breathe.

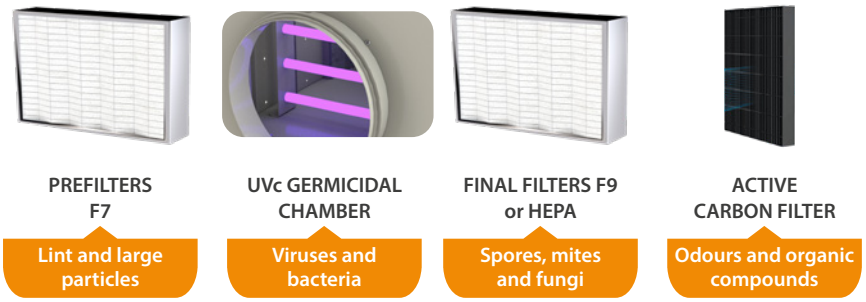
For optimum installation, the filters to be used are those classified as efficiency ePM1 ePM2.5 and ePM10 according to ISO 16890.

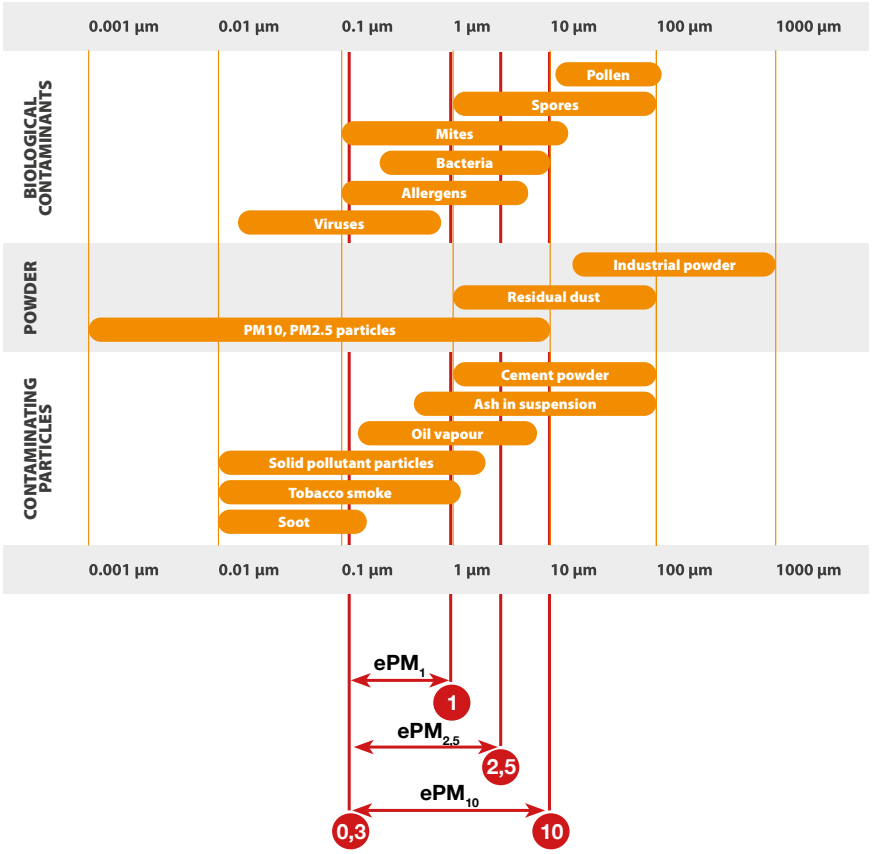
**EPM1 Final Filter Stages**
For applications in buildings such as schools, commercial installations or offices, the use of fine filters, of at least type ePM1, is recommended. These filter types are efficient at retaining particles between 0.3 to 1 micron in diameter and are more economically maintainable.

**HEPA final filter stages**
HEPA filters have the highest efficiency of all and are widely used in the medical industry for applications in surgical areas, to prevent the spread of bacteria and viruses. Their use in commercial applications must be accompanied by strict maintenance and replacement protocols to avoid hygiene problems due to the high concentration of microorganisms.



# FILTRATION EFFICIENCY




| Filters | EN 779 *Em* | EN 1822 | ISO 16890 | | | |
|---|---|---|---|---|---|---|
| | | | ISO $ePM_1$ | ISO $ePM_{2,5}$ | ISO $ePM_{10}$ | ISO COARSE |
| G4 | 90% | - | - | - | - | >90% |
| F7 | 90% | - | >50% | >65-95% | >85% | - |
| F9 | 95% | - | >80% | >95% | >95% | - |
| HEPA H14 | - | >99,995% | - | - | - | - |

## Filtration efficiency

It is common to refer to the efficiency of filters as being in accordance with EN 779 although the current standard is ISO 16890. Both standards deal with the efficiency of coarse and fine dust filters used in ventilation. The EN standard is based on 0.4 micron particles, the ISO 16890 standard defines the efficiency for various particle size fractions measured at intervals starting from 0.3 microns. For HEPA filters, the efficiency is measured in accordance with standard EN 1822.

# APPLICATIONS IN **EDUCATIONAL CENTERS**

The spread of flu and colds in schools is well known to everyone. The spread of bacteria, mold and many other germs can also lead to major health problems and let's not forget the increasingly common problems of pollen, mite allergies and asthma.

Educational centers, universities and training academies are experiencing an increase in attendance figures of students and teachers when the quality of indoor air is purified and free of pollutants.

Our solutions capture the harmful particles that create allergies and eliminate germs, bacteria and viruses to obtain an optimal and healthy air quality, **achieving important long-term benefits for teachers and students.**

## APPLICATIONS

- Training classrooms
- High occupancy hallways
- Cafeterias and dining rooms
- Gyms and activity areas
- Auditoriums

## APPLICATIONS

— Dining rooms
— Reception areas
— Bars and cocktail areas
— Corridors near toilets and kitchens
— High occupancy premises

# IMPROVEMENT OF THE ENVIRONMENT IN **HOTEL AND LEISURE PREMISES**

Enjoying a good meal in a clean and pure environment improves the customer's experience and opinion of your business. This can be achieved thanks to our air purifiers being ideal for applications in the hospitality sector (bars, restaurants, hotels) or leisure sector (gyms, spas, etc.).

Sodeca air purifiers are quiet, **which means so that your customers can focus and enjoy a good experience in their surroundings with clean and healthy air**.

Odour removal is a critical function of air purifiers for restaurant applications where lingering food odours can be a problem for customers. Statistics show that one of the main reasons for not returning to a restaurant is the smell of food, so ensuring a clean, healthy and odour-free environment is a fundamental part of the success of your business.

# PROTECTION AGAINST PARTICLES IN **4.0 INDUSTRIES**

Maintaining an environment free of dust and solid particles is very important in modern industry and 4.0 industry.

These particles, whether from dust, mites, spores, mold or viruses, can greatly affect high technology products, since they can reduce their quality and significantly affect profitability.

The accumulation of particles in electrical cabinets, test instruments or operating sensors is one of the reasons for increased maintenance costs in industries, as well as machinery wear due to airborne dust particles, which can be removed decisively with our purifiers.

## APPLICATIONS

— Data center
— Automotive
— Food
— Logistics
— Production facilities in general

# HEALTHY ENVIRONMENT IN **HOSPITALS AND MEDICAL CENTERS**

Respiratory diseases worsen with age, and the need to breathe clean, healthy air becomes an essential priority. Medical centers, clinics, hospitals and nursing homes are naturally susceptible to having an environment full of pollutants, either because of the number of people who come to them daily or for the diseases that are treated there.

## APPLICATIONS

- Pharmaceutical and Hospital
- Waiting rooms
- Hallways, common areas
- Rooms of at risk patients
- Medical testing areas

Viruses and bacteria can quickly contaminate users or healthcare personnel if the environment is not sufficiently purified using specific methods for the elimination of viruses, bacteria and other germs. The high costs of not having adequate ventilation with air purification systems can be very significant or even catastrophic. These applications require fit for purpose products such as air purifiers manufactured by Sodeca.

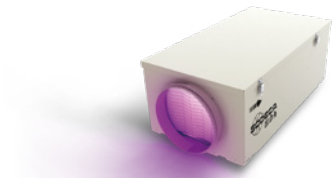
Air purifiers with HEPA filtration stages are designed to quickly and efficiently decrease the spread of infections in people at high risk, reducing contamination by airborne infections and viruses.

Staff and patients suffering from allergies and asthma will breathe clean, healthy air in their surroundings.

# AIR PURIFIERS


15 **AIRDOG**
Air purification unit with a patented system for eliminating viruses and bacteria

19 **SV/FILTER-CG**
Air purification units with UVc germicidal chamber, in line for ducts



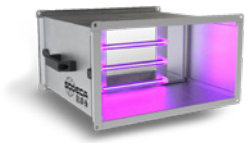
24 **CJK/FILTER/EC**
Air purification units for circular ducts

30 **UPH-EC**
Mobile air purification units

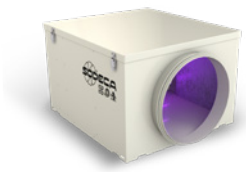
34 **UPM-EC**
Mobile air purification units

38 **UPA**
Units specifically designed for cleaning and purifying indoor air

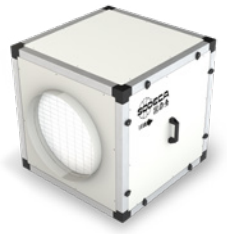
41 **CGR-UVc**
Germicidal chamber without a fan for rectangular ducts



41 **CG/LP-UVc**
Germicidal chamber without a fan for circular ducts



46 **CG/FILTER/UVc**
Air purification units for circular ducts




***Pure air throughout your entire life***

# AIRDOG

## PATENTED AIR PURIFIER, FOR REMOVAL OF VIRUS AND BACTERIA

## AT HOME, CLEAN AIR

"With Sodeca purifiers we have achieved a good quality of air **free of harmful organisms** for health."

WASHABLE FILTER EQUIVALENT TO **HEPA**

**BREATH CLEAN AND HEALTHY AIR**

**FILTERS THAT CAPTURE AEROSOLS**

**REMOVE BACTERIA AND VIRUSES**

**DESIGNED FOR OFFICES, SHOPS, HOTELS AND RESTAURANTS**

**VIRUS REMOVAL CERTIFICATE**

**Model: X5**
**Nº: 2018FM01526R01E**
**VIRUS REMOVAL: 99,87%**

The most powerful air purifier for viruses and bacteria

**Patent PCT/ CN2014/077269**

Airdog
Silicon Valley air expert

Indoor air purifiers are a great advance for health, since they eliminate dust particles, mites and a multitude of bacteria and microorganisms harmful to people, as well as unpleasant odors, reducing respiratory conditions such as asthma and allergies of all type.

These days, the use of an efficient and silent air purifier is essential, at home, in the office or in busy public areas, to maintain good air quality, free of harmful microorganisms.

These highly efficient devices are able to purify the air in rooms of up to 35m$^2$ with the X5 model and up to 90m$^2$ with the X8 model.

# X5 MODEL

The display continuously shows the IAQ,level, under AQI classification, by monitoring the concentration of particles in the air.

5

*Five speeds and low noise*

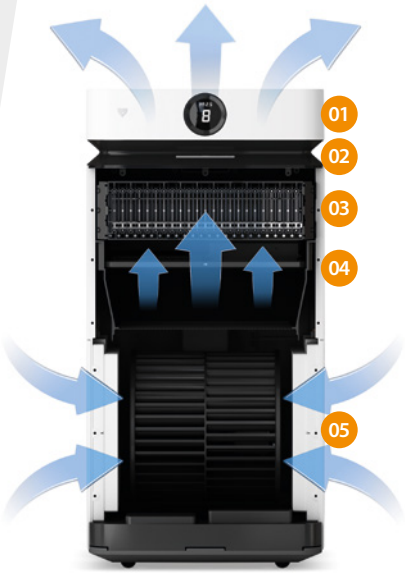
*Air pollution level indicated by colour LED*

| Model | X5 |
|---|---|
| Max surface (m$^2$) | 38 |
| Air flow (m$^3$/h) | 340 |
| Nr of speeds | 4 + night mode |
| Sound level (dB) | 21 — 63 |
| Energy consumption (W) | 10 — 55 |
| Weight (Kg) | 10,7 |
| Dimensions – H x L x W (mm) | 650 x 310 x 300 |

Speed can be set, and low noise levels are achievable (21dB to 34dB) at lower speeds, depending on the model, allowing for a calm and relaxed work or home environment.

**The best IAQ, no need for filter replacement.**

**The filter plate is washable and reusable.**




## PRINCIPAL CHARACTERISTICS FOR BOTH MODELS

**01.** Display showing air quality.

**02.** Filter stage for odours and COV.

**03.** Removable and washable plate for spores, fungi and dust.

**04.** Ioniser to remove particles dangerous to health, such as viruses and bacteria.

**05.** Double pre-filter stage for catching dust and particles.

# X8 MODEL

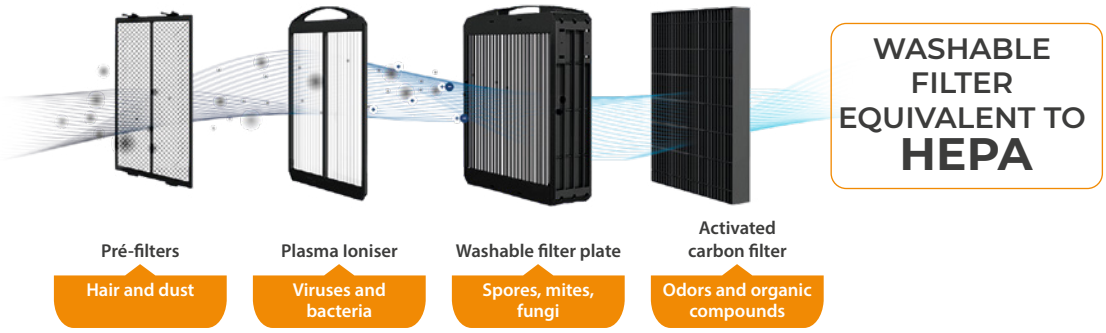
Remote IAQ detector, displaying air contamination within the room, air temperature, humidity, dust concentration and formaldehyde produced by human metabolism.

*Six speeds for low noise level*

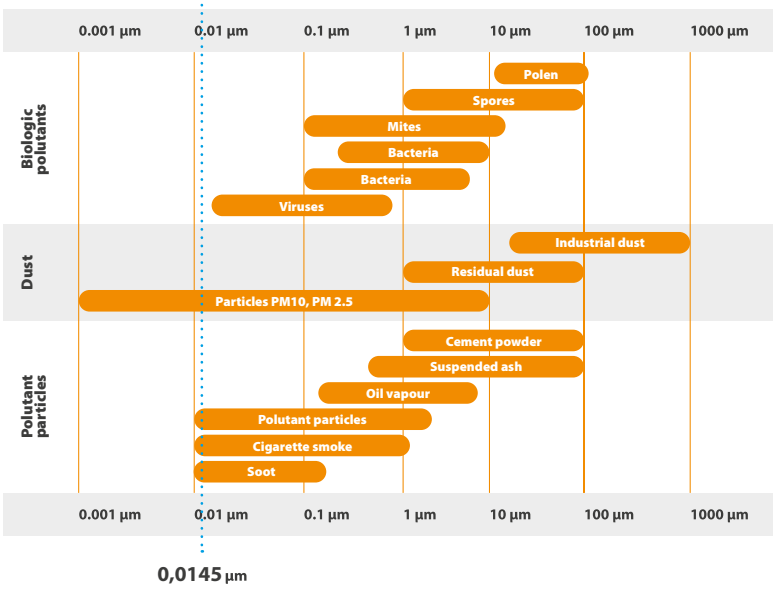
*Can be easily moved*

| Model | X8 |
|---|---|
| Max surface ($m^2$) | 90 |
| Air flow ($m^3/h$) | 800 |
| Nr of speeds | 5 + night mode |
| Sound level (dB) | 34 — 63 |
| Energy consumption (W) | 11,5 — 110 |
| Weight (Kg) | 19,7 |
| Dimensions – H x L x W (mm) | 760 x 380 x 380 |

## FILTRATION AND EFFICIENCY



**With this filtering system particles and aerosols are captured from 0.0145 µm**



# SV/FILTER-CG

CE ACCORDING ErP

## AIR PURIFYING UNITS WITH UVC GERMICIDAL CHAMBER

- UVC GERMICIDAL CHAMBER
- LOW NOISE LEVEL
- DIFFERENT STAGES OF FILTRATION
- IDEAL FOR RETAIL AND OTHER PREMISES

HELP TO STOP COVID-19

INTERNATIONAL IUVA ULTRAVIOLET ASSOCIATION

CG

WE BET ON UVc TECHNOLOGY TO BEAT THE VIRUS

F7 + F9

FILTRATION STAGE

# SV/FILTER-CG

***Air purifying units, with UVc germicidal chamber, in-line for duct installation and with different stages of filtration***

Characteristics:
- Built-in UVc germicidal chamber.
- Acoustic casing of sound absorbing material.
- Standard flanges at intake and discharge sides for easy in-duct installation.
- F7 + F9 filters.
- Quick access inspection cover for cleaning and maintenance.

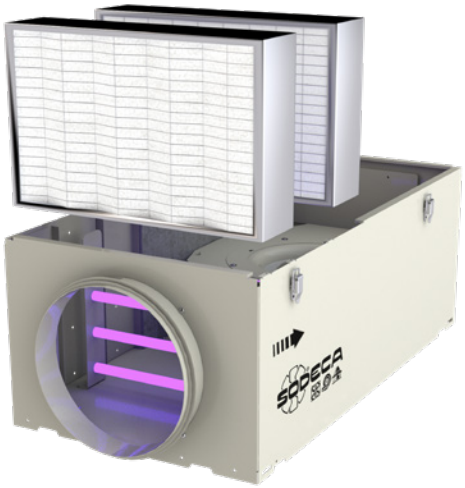
Casing:
- Galvanized steel sheet casing.
- Backward curved impellers, except for models 125 and 150 which have multi-bladed impellers. Supplied with four support feet for easy mounting.
- Access doors to facilitate maintenance and cleaning.

Motor:
- External rotor motors, with built-in thermal protector, class F, with ball bearings, IP-54 protection.
- Single phase 230V. -50 / 60Hz. Adjustable.
- Maximum temperature of transported air + 50ºC.

Finish:
- Anticorrosive in polyester resin polymerised at 190 ºC, after degreasing with phosphate-free nanotechnological treatment.

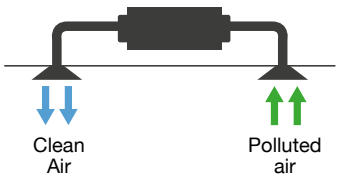
On request:
- Alternative filtration stages: G4 + F6 and F6 + F8.
- Automatic control system.

F7 + F9

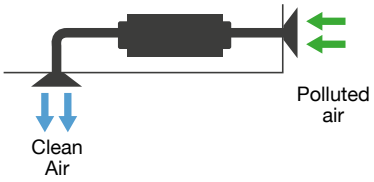


## *Application examples*

Indoor air purification




Collection and purification of outdoor air




## *Order code*

***SV/FILTER/CG — 200/H — F7+F9***

- Air purifying units with UVc germicidal chamber
- Impeller diameter in mm
- Filter F7 + F9

## *Filters characteristics*

| Filters | EN 779 *Em* | EN 1822 | ISO 16890 | | | |
|---|---|---|---|---|---|---|
| | | | ISO $ePM_1$ | ISO $ePM_{2,5}$ | ISO $ePM_{10}$ | ISO COARSE |
| G4 | 90% | - | - | - | - | >90% |
| F7 | 90% | - | >50% | >65-95% | >85% | - |
| F9 | 95% | - | >80% | >95% | >95% | - |
| HEPA H14 | - | >99,995% | - | - | - | - |

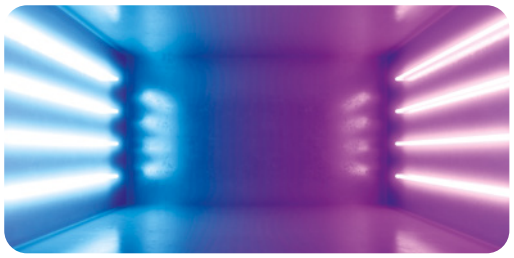
## Technical characteristics

| Model | Recommended effective working area (m²) | Speed (r/min) | Maximum admissible current (A) 230V | Maximum flow (m³/h) Standard Filters (F7 + F9) | Filters on request (G4 + F6) | Filters on request (F6 + F8) | Weight (kg) |
|---|---|---|---|---|---|---|---|
| SV/FILTER-CG-200/H | 40 | 1240 | 0,65 | 375 | 590 | 430 | 15,4 |
| SV/FILTER-CG-250/H | 60 | 2380 | 1,25 | 525 | 660 | 560 | 18,1 |
| SV/FILTER-CG-315/H | 80 | 1330 | 0,85 | 790 | 1035 | 850 | 26,7 |
| SV/FILTER-CG-350/H | 120 | 1280 | 0,95 | 1180 | 1550 | 1270 | 36,6 |
| SV/FILTER-CG-400/H | 160 | 1330 | 1,8 | 1600 | 2050 | 1720 | 46,7 |

* Recommended area with F7 + F9 filters, and with a 3-meter high room.

## Technical characteristics of the UVc germicidal chamber

These purification units integrate a germicidal chamber, built on the basis of UV “C” ultraviolet lamps in a spectrum of 256nm, wave amplitude indicated to inactivate a wide variety of microorganisms by absorbing short wavelength energy through DNA and RNA. For specific types of viruses or bacteria that are affected by the radiation dose from the germicidal chamber, consult the specific document.



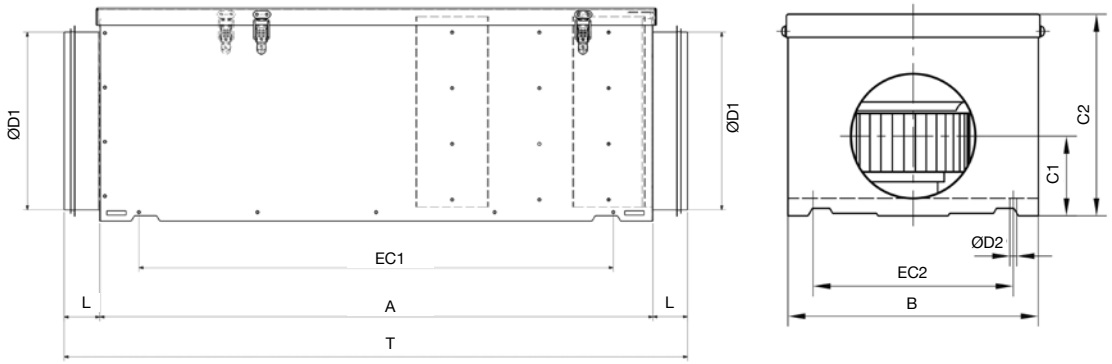
| Model | Number of lamps | Total electrical power (W) | Total radiation power UVc (W) | Radiation dose* (mJ/cm²) |
|---|---|---|---|---|
| SV/FILTER-CG-200/H | 4 | 36 | 11,2 | 5,3 |
| SV/FILTER-CG-250/H | 4 | 36 | 11,2 | 4,7 |
| SV/FILTER-CG-315/H | 4 | 102 | 28 | 8,4 |
| SV/FILTER-CG-350/H | 4 | 102 | 28 | 6,2 |
| SV/FILTER-CG-400/H | 4 | 102 | 28 | 5,1 |

* Minimum dose calculated based on flow with F7 + F9 filters

## Erp. (Energy Related Products)

Information on Directive 2009/125 / EC downloadable from the SODECA website or QuickFan selection program.

## Dimensions mm



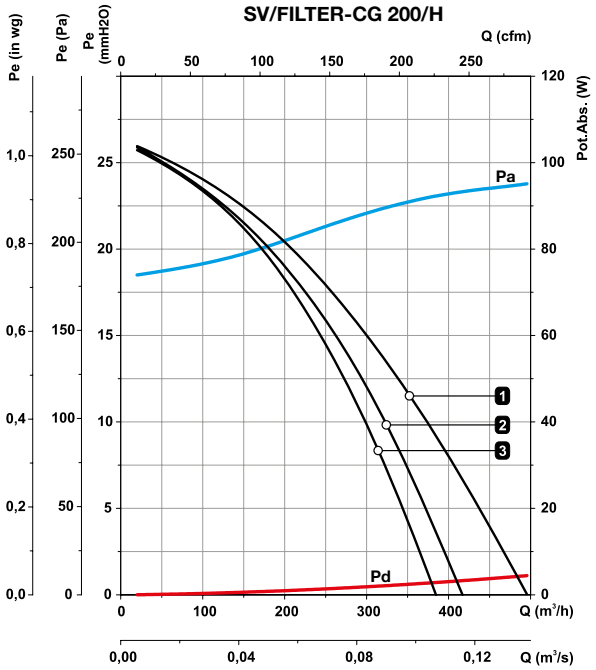

| Model | A | B | C1 | C2 | ØD1 | L | ØD2 | EC1 | EC2 | T |
|---|---|---|---|---|---|---|---|---|---|---|
| SV/FILTER-CG-200/H | 775 | 395 | 117 | 273 | 200 | 36 | 7 | 725 | 345 | 847 |
| SV/FILTER-CG-250/H | 775 | 395 | 140 | 293 | 250 | 50 | 7 | 725 | 345 | 875 |
| SV/FILTER-CG-315/H | 860 | 520 | 175 | 371 | 315 | 48 | 8,5 | 809 | 469 | 956 |
| SV/FILTER-CG-350/H | 960 | 610 | 200 | 410 | 355 | 48 | 8,5 | 909 | 564 | 1056 |
| SV/FILTER-CG-400/H | 1035 | 670 | 219 | 455 | 400 | 38 | 8,5 | 984 | 624 | 1111 |

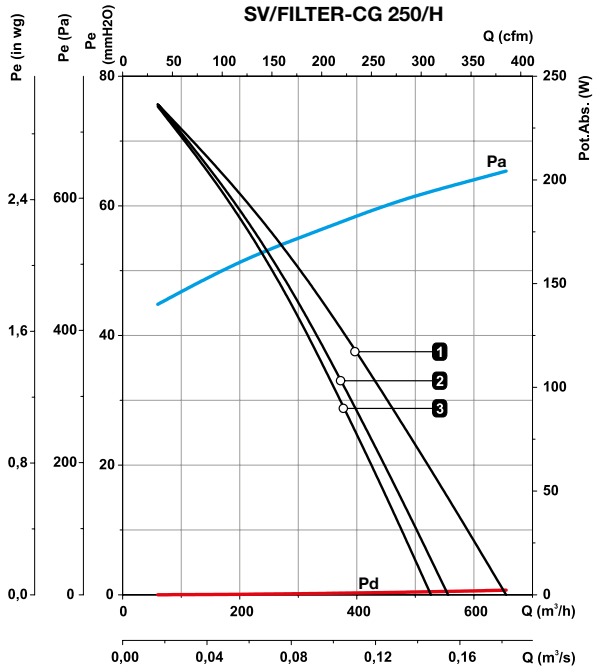
## *Curve characteristic*

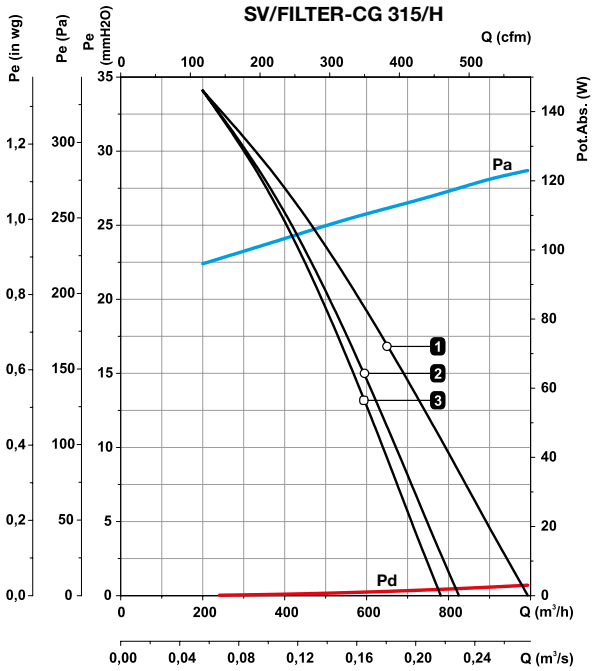
Equipment curve with standard built-in filters **3** F7+F9

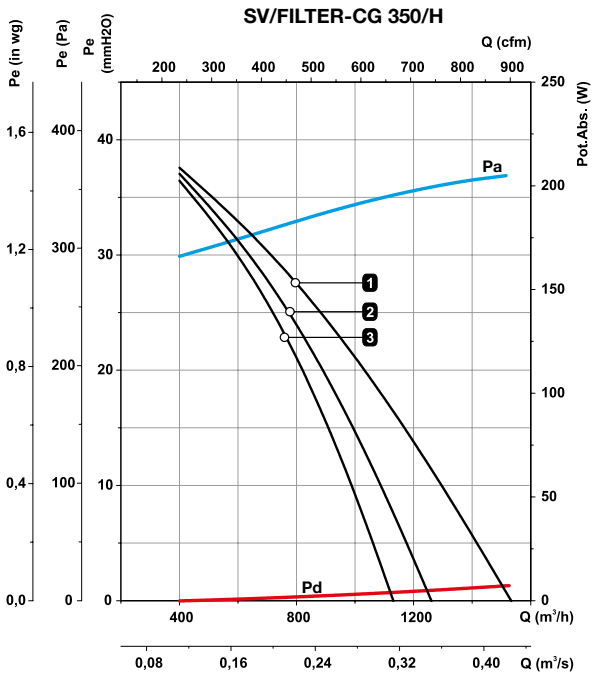
Equipment curve with alternative filters **1** G4+F6 **2** F6+F8

Static pressure — Dynamic Pressure — Absorbed power



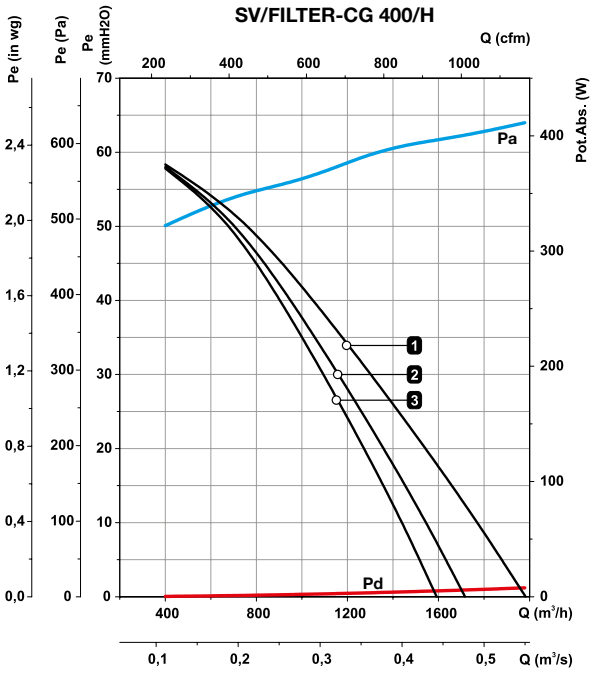



## Curve characteristics

Equipment curve with standard built-in filters **3** F7+F9

Equipment curve with alternative filters **1** G4+F6 **2** F6+F8

Static pressure | Dynamic Pressure | Absorbed power




## Accessories

FILTERS

CJFILTER

SI-PRESSURE SWITCH

SI-PRESSURE

SI-MF

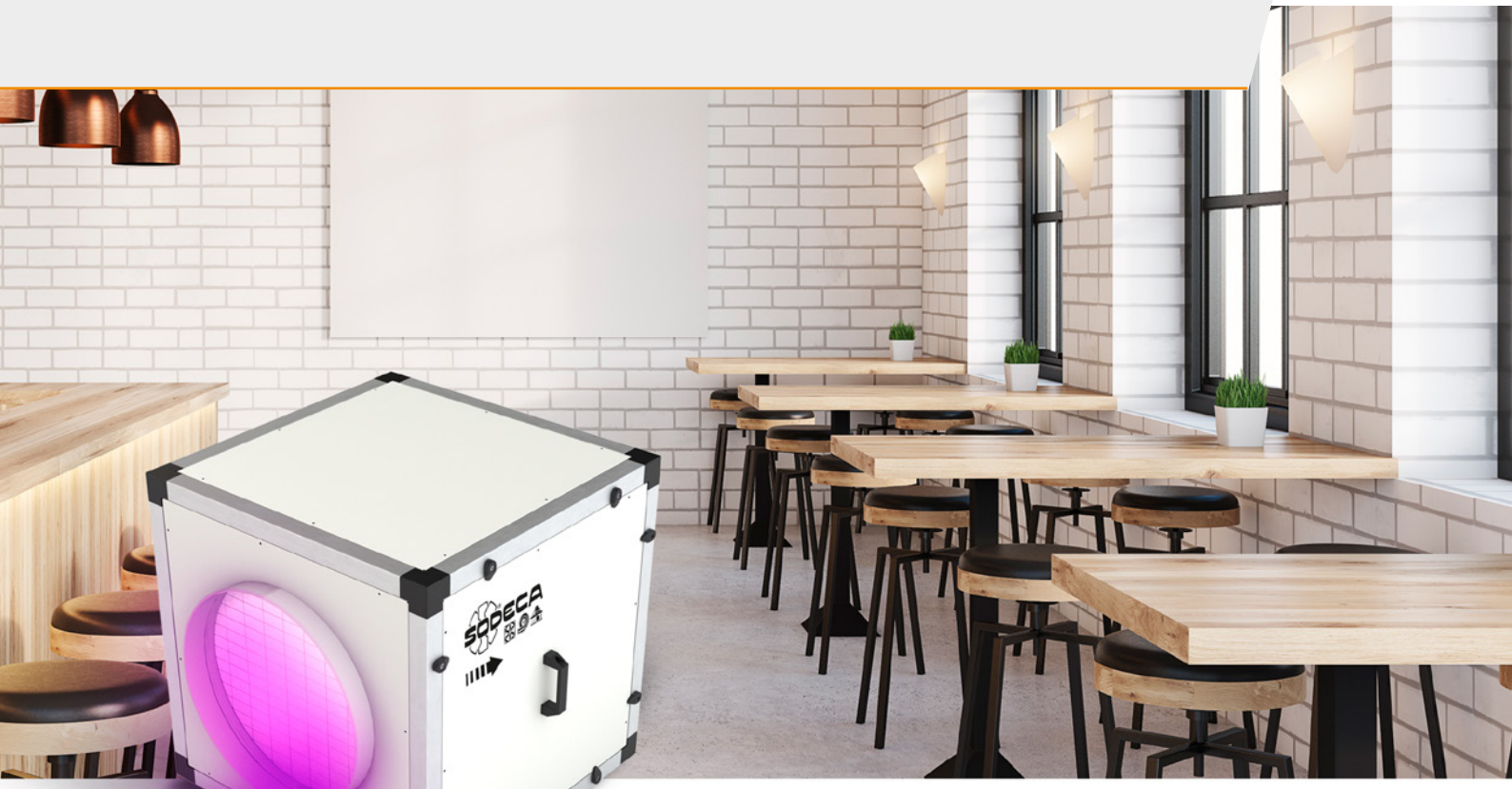
SI-CO2 IND

PRESSURE PROBE

INT

# CJK/FILTER-EC

## AIR PURIFYING UNITS




- PURIFIES INDOOR AIR
- UVC GERMICIDAL CHAMBER
- DIFFERENT STAGES OF FILTERING
- EC MOTOR TECHNOLOGY WITH LOW POWER CONSUMPTION
- 25 MM ACOUSTIC CASING
- IDEAL FOR RETAIL AND OTHER PREMISES

WE BET ON UVc TECHNOLOGY TO BEAT THE VIRUS

F7 + F9

F7 + HEPA H14

FILTRATION STAGE

The CJK / FILTER / EC air purifying units have been designed for the movement, cleaning, odour removal and purification of air, in high occupancy areas with high demands on soundproofing and versatility.

### ENERGY SAVING

The air inlet aperture has been designed to aid laminar air flow which, together with a dynamic pressure balancing chamber, helps to optimise efficiency.

The EC motor's high-performance technology is a key element in reducing electrical consumption and can be easily controlled by a 0-10V signal from any sensor.

### LOW SOUND LEVEL

The 25mm thick noise reducing outer panels use bespoke, high quality insulating materials and make this ideal equipment for installation in areas where a low noise level is required.

### DURABILITY

The outer panels of these units are made of pre-finished sheet metal with 40mm aluminium structural frames to maximise the life of the equipment, allowing it to be installed in outdoors corrosive areas. The installation of a rain cover is recommended to prevent entry of water.

### EASE OF INSTALLATION AND MAINTENANCE

The access door allows quick access to clean the impeller and replace filters.

F

### FILTRATION STAGES

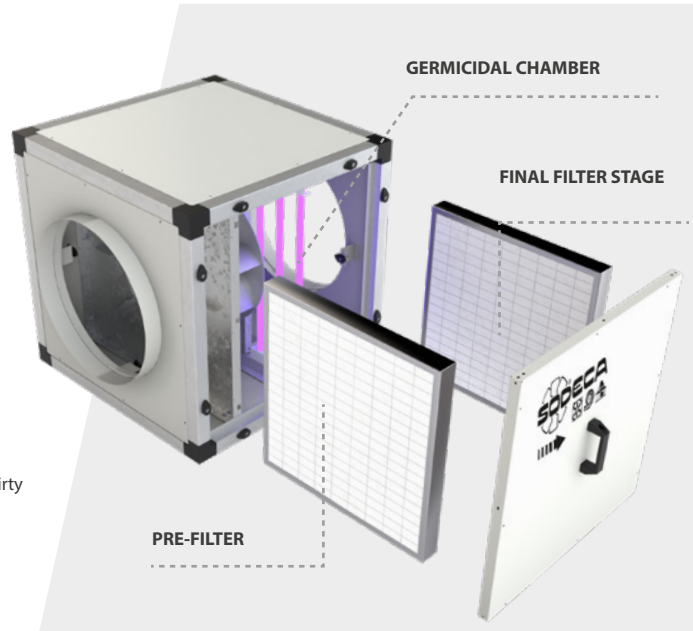
The units incorporate two stages of F7 + F9 or F7 + HEPA H14 filtration, depending on the model, as well as an activated carbon filter for the elimination of odours, giving a combination with excellent filtration performance.

CG

### GERMICIDAL CHAMBER

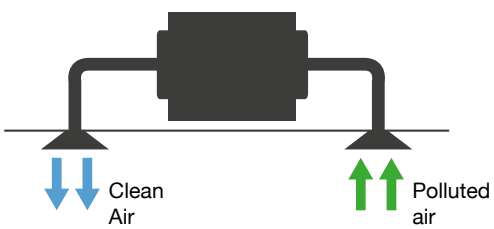
Depending on model, these purification units can be supplied with an integrated UVc ultraviolet germicidal chamber.

Control and dirty filters alarm

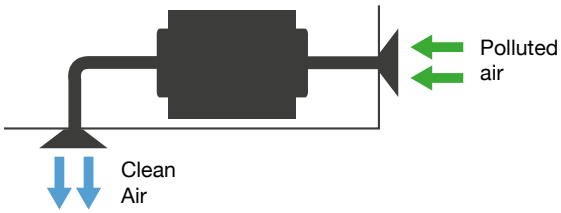



## *Example of application*

Indoor air purification




Capturing and purifying outdoor air



# CJK/FILTER/EC

***Air purifying units for circular ducts, with 25mm acoustic panels for noise reduction and EC motor Technology.***

Characteristics:
- Frame made from 40mm profile aluminium.
- Outer panels made of 25 mm thick, high quality acoustic insulation, and pre-finished sheet metal.
- Backward curved impeller.
- Standard flanges on intake and discharge sides to facilitate installation in ducts.
- Filtration stages according to model:
  - F7 + F9
  - F7 + HEPA H14
  - Activated carbon filter odour removal.
- Control and alarm of dirty filters.
- Germicidal chamber with UVc (256 nm), depending on model.
- Inspection cover for maintenance and replacement of filters.
- Air inlet with diffusers to increase the efficiency of the fan.

Engine:
- High efficiency EC technology, external rotor motor, controllable by 0-10V signal.
- Single-phase 200-240 V 50/60 Hz and three-phase 380-480 V 50/60 Hz.
- Air temperature range of -25ºC to +60ºC.

Finish:
- Aluminum profile frame and pre-finished sheet metal with 25mm thick acoustically insulated panels.

On request:
- Particle sensor for automatic monitoring.

## Order code

**CJK/FILTER/EC — 220 — F7+F9 — CG**

| 220 | F7+F9 | CG |
|---|---|---|
| Air purifying units for circular ducts | Impeller diameter in mm | Filter F7 + F9<br>Filter F7 + HEPA H14 | Germicidal UVc chamber |

## Filters characteristics

| Filters | EN 779 *Em* | EN 1822 | ISO 16890 | | | |
|---|---|---|---|---|---|---|
| | | | ISO $ePM_1$ | ISO $ePM_{2,5}$ | ISO $ePM_{10}$ | ISO COARSE |
| F7 | 90% | - | >50% | >65-95% | >85% | - |
| F9 | 95% | - | >80% | >95% | >95% | - |
| HEPA H14 | - | >99,995% | - | - | - | - |

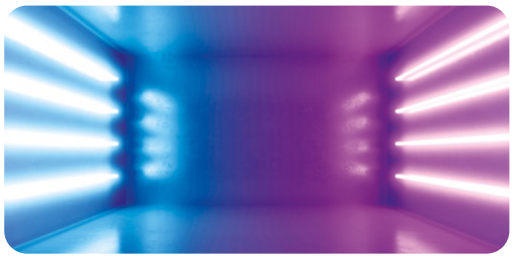
## Technical characteristics

| Model | Recommended effective working area (m2)[1] | | Speed | Maximum power | Power supply | Sound pressure level at 50% of max speed[2] | Maximum flow (m³/h) | | Weight |
|---|---|---|---|---|---|---|---|---|---|
| | Filters (F7+F9) | Filters (F7+H14) | (r/min) | (W) | | dB(A) | Filters (F7+F9) | Filters (F7+H14) | (kg) |
| CJK/FILTER/EC-220 | 50 | - | 3265 | 176 | 200-240V 50/60Hz 1Ph | 48 | 420 | - | 32 |
| CJK/FILTER/EC-250 | 60 | - | 2850 | 180 | 200-240V 50/60Hz 1Ph | 49 | 500 | - | 33 |
| CJK/FILTER/EC-310 | 65 | 55 | 1920 | 175 | 200-240V 50/60Hz 1Ph | 47 | 550 | 450 | 34 |
| CJK/FILTER/EC-400 | 190 | 155 | 1550 | 460 | 200-240V 50/60Hz 1Ph | 47 | 1600 | 1300 | 68 |
| CJK/FILTER/EC-500 | 270 | 230 | 1250 | 1150 | 380-480V 50/60Hz 3Ph | 51 | 2250 | 1950 | 118 |

[1] Recommended effective area with premises 3 meters high. [2] Radiated sound pressure level in dB (A) at 3 m distance

## Technical characteristics of the UVc germicidal chamber

Depending on model, these purification units can integrate a germicidal chamber, built on the basis of UVc ultraviolet lamps in a 256 nm spectrum, a wave amplitude indicated to inactivate a wide variety of microorganisms by absorbing short wavelength energy through DNA and RNA. For specific types of viruses or bacteria that are affected by the radiation dose from the germicidal chamber, consult the specific document.



| Model | Number of lamps | Electrical power (W) | UVc radiation power (W) | Radiation dose* (mJ/cm²) |
|---|---|---|---|---|
| CJK/FILTER/EC-220 | 6 | 54 | 16,8 | 7,2 |
| CJK/FILTER/EC-250 | 6 | 54 | 16,8 | 6,0 |
| CJK/FILTER/EC-310 | 6 | 54 | 16,8 | 6,7 |
| CJK/FILTER/EC-400 | 4 | 102 | 28 | 5,4 |
| CJK/FILTER/EC-500 | 6 | 153 | 42 | 7,0 |

*Minimum dose calculated based on the maximum flow rate.

## Erp. (Energy Related Products)

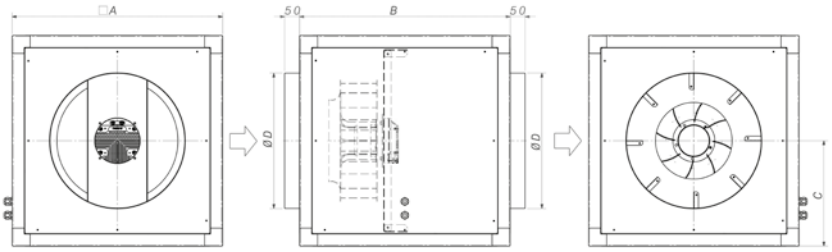
Information on Directive 2009/125 / EC downloadable from the SODECA website or QuickFan selection program.

## Acoustic characteristics

**Sound power spectrum Lw (A) in dB (A) per frequency band in Hz.**
**Values irradiated at maximum speed and average flow.**

| Model | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|---|---|---|---|---|---|---|---|---|
| CJK/FILTER/EC-220 | 63 | 65 | 63 | 58 | 55 | 51 | 45 | 35 |
| CJK/FILTER/EC-250 | 64 | 66 | 64 | 59 | 56 | 52 | 46 | 36 |
| CJK/FILTER/EC-310 | 62 | 64 | 62 | 57 | 54 | 50 | 44 | 34 |
| CJK/FILTER/EC-400 | 66 | 61 | 56 | 53 | 54 | 49 | 43 | 32 |
| CJK/FILTER/EC-500 | 69 | 65 | 60 | 61 | 61 | 58 | 59 | 54 |

## Dimensions mm




| Model | A | B | C | ØD |
|---|---|---|---|---|
| CJK/FILTER/EC-220 | 500 | 500 | 250 | 315 |
| CJK/FILTER/EC-250 | 500 | 500 | 250 | 355 |
| CJK/FILTER/EC-310 | 500 | 500 | 250 | 355 |
| CJK/FILTER/EC-400 | 700 | 700 | 350 | 450 |
| CJK/FILTER/EC-500 | 900 | 900 | 450 | 500 |

## Accessories

INT

ACE

SI-MF

SI-CO2 IND

CPC

PT

MTP

TEJ

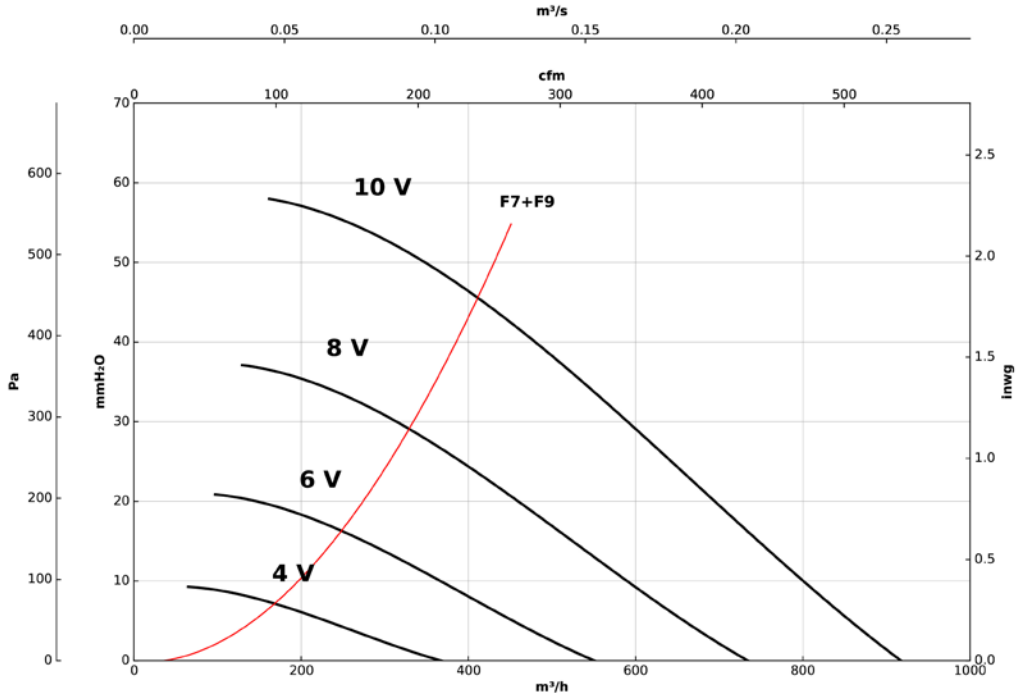
VIS

FILTERS

## Characteristic curves

Q= Flow in $m^3/h$, $m^3/s$ and cfm. Pe= Static pressure in $mmH_2O$, Pa and inwg.

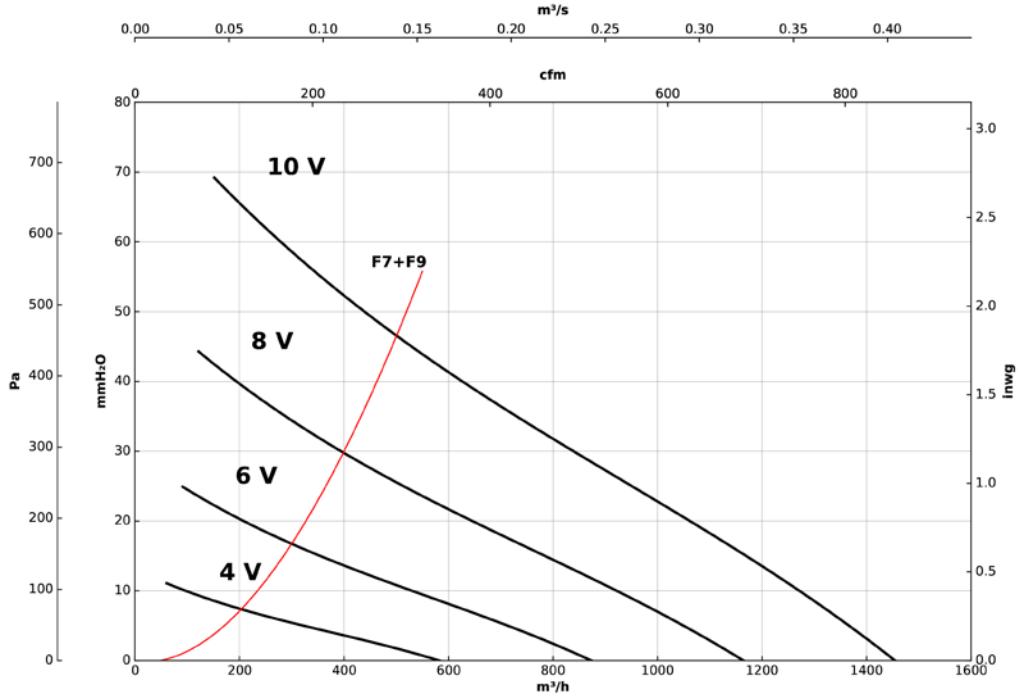
### CJK/FILTER/EC-220



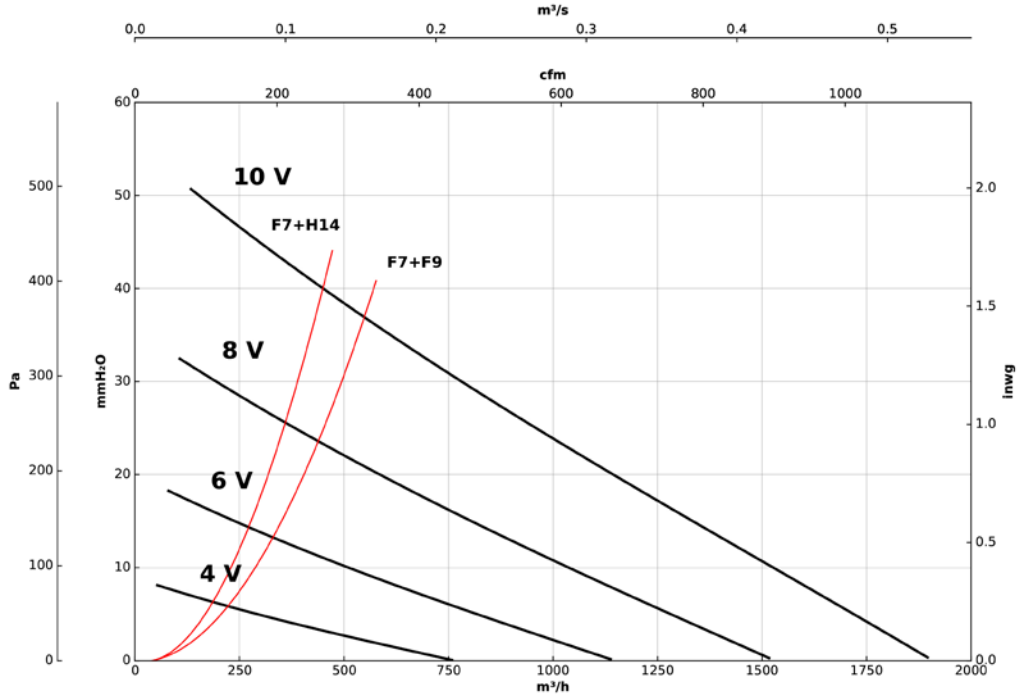
## *Characteristic curves*

Q= Flow in $m^3/h$, $m^3/s$ and cfm. Pe= Static pressure in $mmH_2O$, Pa and inwg.

### CJK/FILTER/EC-250



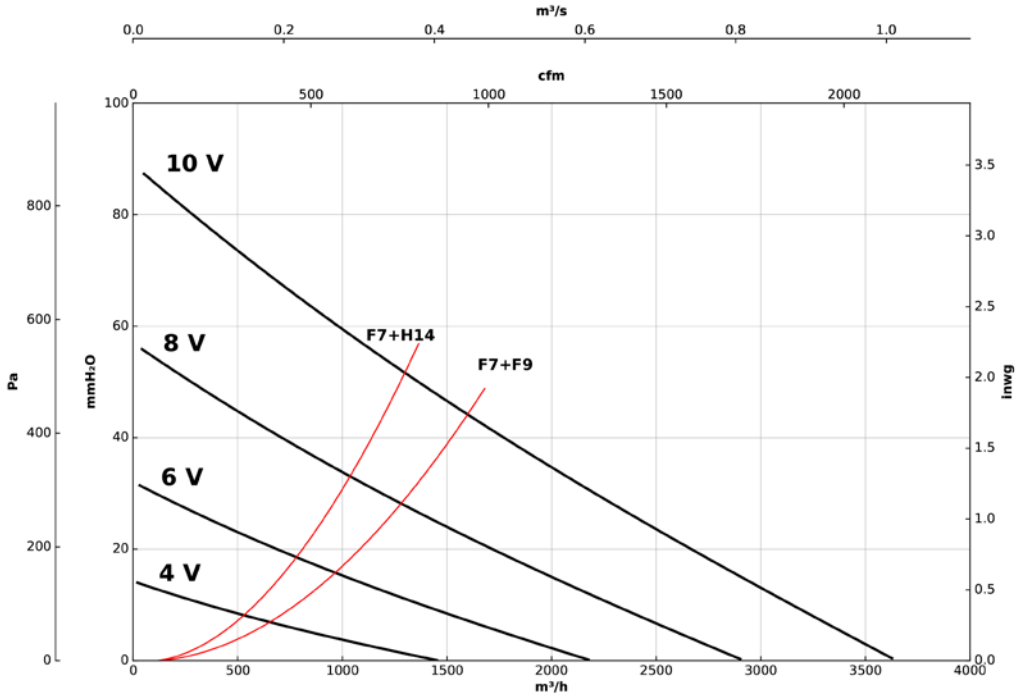

### CJK/FILTER/EC-310



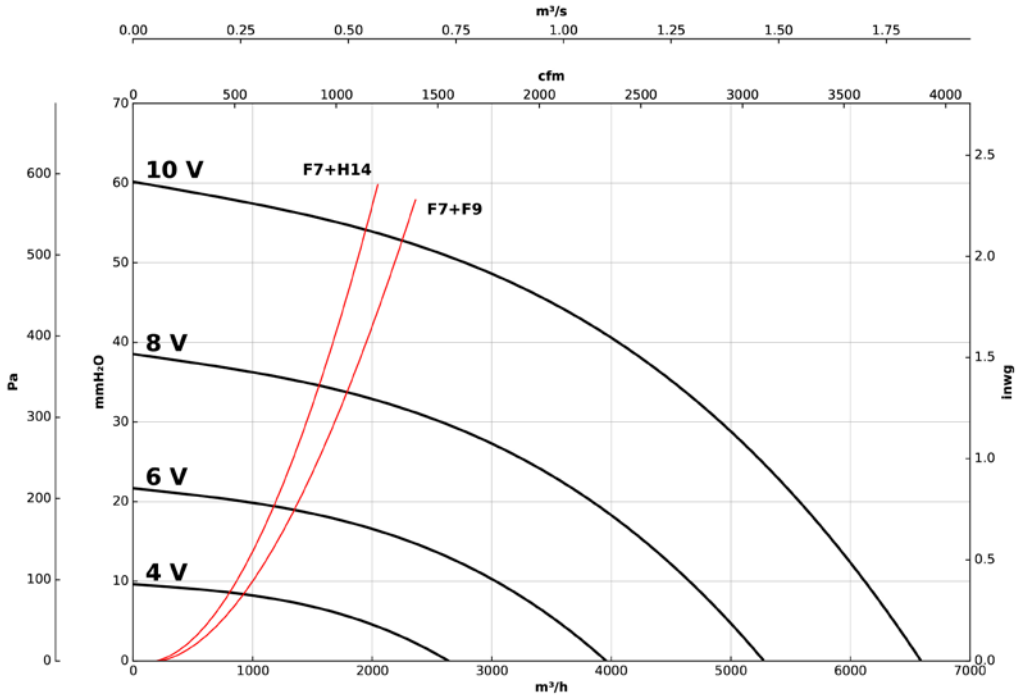
## *Characteristic curves*

Q= Flow in $m^3/h$, $m^3/s$ and cfm. Pe= Static pressure in $mmH_2O$, Pa and inwg.

### CJK/FILTER/EC-400




### CJK/FILTER/EC-500



# UPH/EC

## MOBILE AIR PURIFICATION UNITS

- PLUG & PLAY SYSTEM WITH AUTOMATIC CONTROL
- LOW ENERGY MOTOR WITH EC TECHNOLOGY
- UVC GERMICIDAL CHAMBER
- 25 MM THICKACOUSTIC CASING
- 3 STAGES OF FILTRATION
- IDEAL FOR ANY BUSINESS

HELP TO STOP COVID-19

INTERNATIONAL IUVA ULTRAVIOLET ASSOCIATION

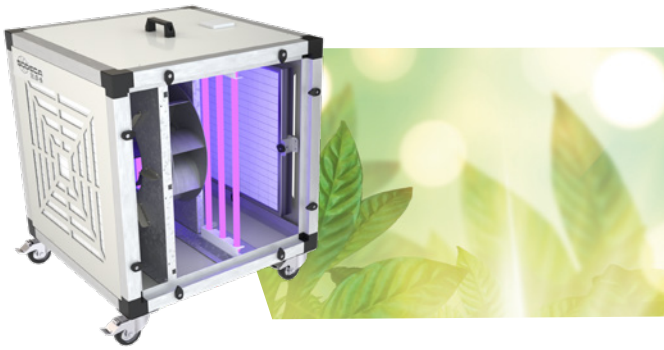
CG
WE BET ON UVc TECHNOLOGY TO BEAT THE VIRUS

F7 + FCA + F9

F7 + FCA + HEPA H14

FILTRATION STAGES

UPH/EC air purification units are designed for cleaning and purifying air and eliminating odours in high occupancy areas where low noise and versatility are important.



### ENERGY SAVING

The guide vanes at the air intake prevent air turbulence, which together with a dynamic pressure balance chamber, optimise the unit's efficiency.

The high performance EC technology electric motor is a key element in reducing power consumption, and can be easily controlled using any 0-10 V sensor.

### LOW NOISE LEVEL

The 25mm thick acoustic casing reduces noise through the use of high-quality insulating materials designed for these applications, making it the perfect fan to use in areas that require low noise levels.

### DURABILITY

The panels of these units are made of prefinished sheet steel and the structural frames are made of aluminium, which increases the life of the fan and allows them to be installed in high corrosion areas. We recommend that the units are located under cover to prevent water ingress.

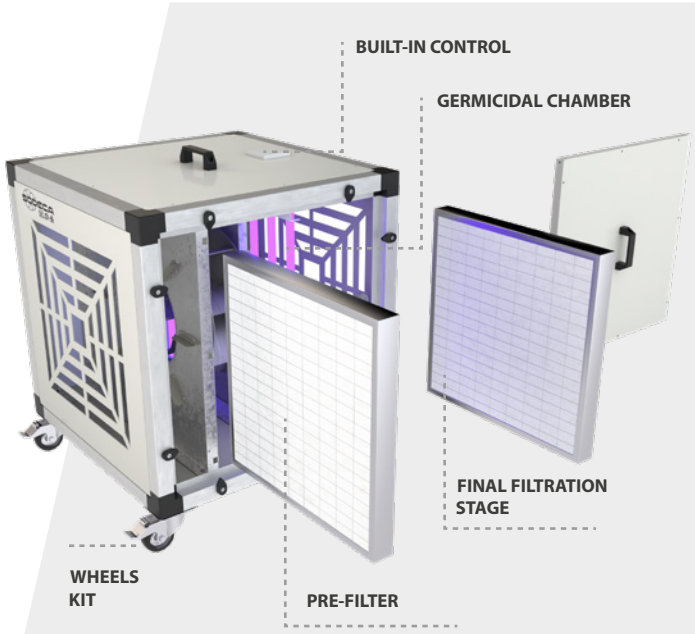
### EASY TO INSTALL AND MAINTAIN

The inspection cover is used for quick access for cleaning the impeller and replacing the filters.

F

### FILTRATION STAGES

Depending on the model, the units incorporate two filtration stages, F7 + F9 or F7 + HEPA H14, as well as an activated carbon filter for eliminating odours. These provide the unit with excellent filtration properties.



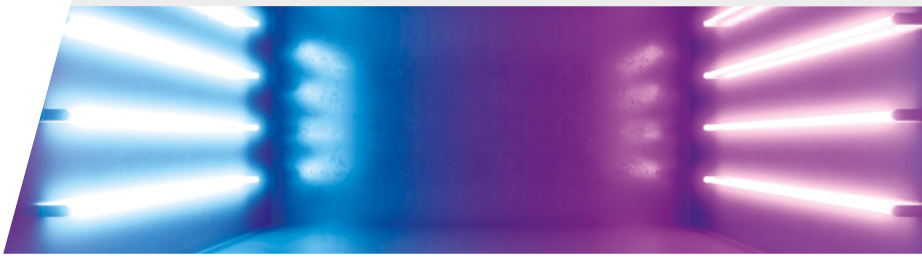

### BUILT-IN CONTROL SYSTEM

· Fan ON/OFF
· Adjustable flow 0%-100%
· Germicidal chamber ON/OFF
· Time control
. Dirty filter monitoring and alarm
· Automatic operation

CG

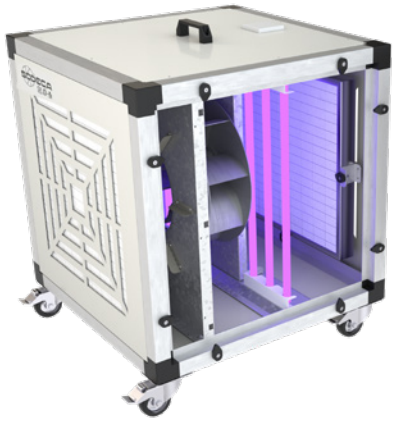
### GERMICIDAL CHAMBER

Depending on the model, these purification units can incorporate a germicidal chamber that utilises UVc ultraviolet lamps.



# UPH/EC

***Mobile air purification units with EC Technology motors and a 25mm thick acoustically insulated casing to reduce noise.***



Characteristics:
- 40mm aluminium profile structure.
- Wheels kit
- Plug & Play system with built-in control.
- Cases with a high quality, 25mm thick acoustic panels made of prefinished sheet.
- Backward curved impeller.
- Filtration stages depending on the model:
  - F7 + F9
  - F7 + HEPA H14
- Activated carbon filter for eliminating odours.
- Dirty filter monitoring and alarm. Germicidal chamber with UVc ultraviolet lamps (256 nm), depending on the model.
- Inspection cover for maintenance and filter replacement.
- Air inlet diffuser to increase fan efficiency.

Motor:
- High efficiency EC technology, external rotor motors, controlled by 0-10 V signal.
- Single phase 200-240V– 50 / 60Hz
- Temperature range of carried air -25 °C to +60 °C.

Finish:
- Aluminium frame and prefinished sheet steel panels with 25mm thick thermal and acoustic insulation.

On request:
- Particle sensor for automatic monitoring.

## Order code

**UPH/EC — 310 — F7 + F9 — CG**

| UPH/EC | 310 | F7 + F9 | CG |
|---|---|---|---|
| Mobile air purification units | Impeller diameter in mm | F7 + F9 filter<br>F7 + HEPA H14 filter | UVc Germicidal chamber |

## Characteristics of the filters

| Filters | EN 779 *Em* | EN 1822 | ISO 16890 | | | |
|---|---|---|---|---|---|---|
| | | | ISO $ePM_1$ | ISO $ePM_{2.5}$ | ISO $ePM_{10}$ | ISO COARSE |
| F7 | 90% | - | >50% | >65-95% | >85% | - |
| F9 | 95% | - | >80% | >95% | >95% | - |
| HEPA H14 | - | >99.995% | - | - | - | - |

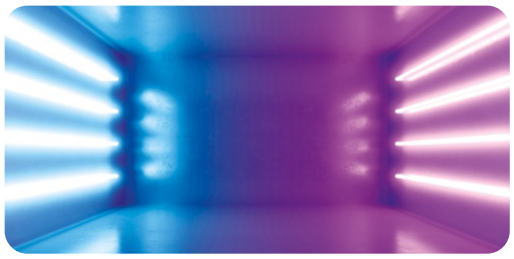
## Technical characteristics

| Model | Recommended working surface[1] ($m^2$) | | Speed | Maximum power | Power supply | Sound pressure level at 50% of max. speed[2] | Maximum flow rate ($m^3/h$) | | Weight |
|---|---|---|---|---|---|---|---|---|---|
| | Filters (F7 + F9) | Filters (F7 + H14) | (r/min) | (W) | | dB(A) | Filters (F7 + F9) | Filters (F7 + H14) | (kg) |
| UPH/EC-220 | 50 | - | 3265 | 176 | 200-240V 50/60Hz 1Ph | 48 | 420 | - | 32 |
| UPH/EC-250 | 60 | - | 2850 | 180 | 200-240V 50/60Hz 1Ph | 49 | 500 | - | 33 |
| UPH/EC-310 | 65 | 55 | 1920 | 175 | 200-240V 50/60Hz 1Ph | 47 | 550 | 450 | 34 |
| UPH/EC-400 | 190 | 155 | 1550 | 460 | 200-240V 50/60Hz 1Ph | 47 | 1600 | 1300 | 68 |

[1]Recommended surface for a space 3 metres high. [2] Radiated sound pressure level in dB (A) at 3 m distance

## *Technical characteristics of the UVc germicidal chamber*

Depending on the model, these purification units can incorporate a germicidal chamber that utilises UVc ultraviolet lamps at 256nm wave length, which is the optimum amplitude for deactivating most micro-organisms by absorbing short wavelength energy through the DNA and RNA. Refer to the specific document for a list of the types of viruses or bacteria that are affected by the dose of radiation emitted inside the germicidal chamber.



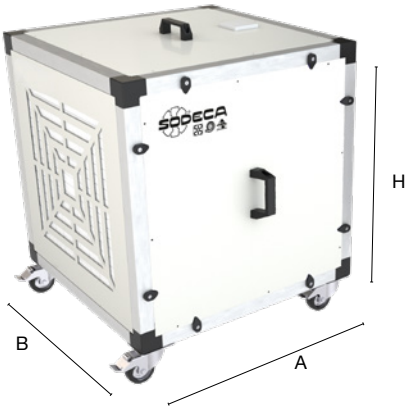
| Model | Number of lamps | Electrical power (W) | UVc radiation power (W) | Radiation dose* (mJ/cm²) |
|---|---|---|---|---|
| UPH/EC-220 | 6 | 54 | 16,8 | 7,2 |
| UPH/EC-250 | 6 | 54 | 16,8 | 6,0 |
| UPH/EC-310 | 6 | 54 | 16,8 | 6,7 |
| UPH/EC-400 | 4 | 102 | 28 | 5,4 |

*Minimum dose calculated based on the maximum flow rate.

## *Erp. (Energy Related Products)*

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

## *Dimensions mm*




| Model | A (mm) | B (mm) | H (mm) |
|---|---|---|---|
| UPH/EC-220 | 500 | 542 | 642 |
| UPH/EC-250 | 500 | 542 | 642 |
| UPH/EC-310 | 500 | 542 | 642 |
| UPH/EC-400 | 700 | 742 | 842 |

*Data subject to change without prior warning

# UPM/EC

## MOBILE AIR PURIFYING UNITS

- PLUG & PLAY SYSTEM WITH AUTOMATIC CONTROL
- UVC GERMICIDAL CHAMBER
- 4 STAGES OF FILTRATION
- LOW-POWER, EC MOTOR TECHNOLOGY
- 25 MM THICK ACOUSTIC CASE
- IDEAL FOR THE HOSPITALITY AND OTHER INDUSTRIES

HELP TO STOP COVID-19

INTERNATIONAL IUVA ULTRAVIOLET ASSOCIATION

CG WE BET ON UVc TECHNOLOGY TO BEAT THE VIRUS

G2 + F7 + F9 + FCA

G2 + F7 + HEPA H14 + FCA

STAGES OF FILTRATION

The UPM / EC air purifying units have been designed for mobility, purifying and cleaning air and eliminating odours, in areas of high occupancy where low noise and versatility are important.

**ENERGY SAVING**
The air inlet aperture has been designed to aid laminar air flow which, together with a dynamic pressure balancing chamber, helps to optimise efficiency.
The EC motor's high-performance technology is a key element in reducing electrical consumption.

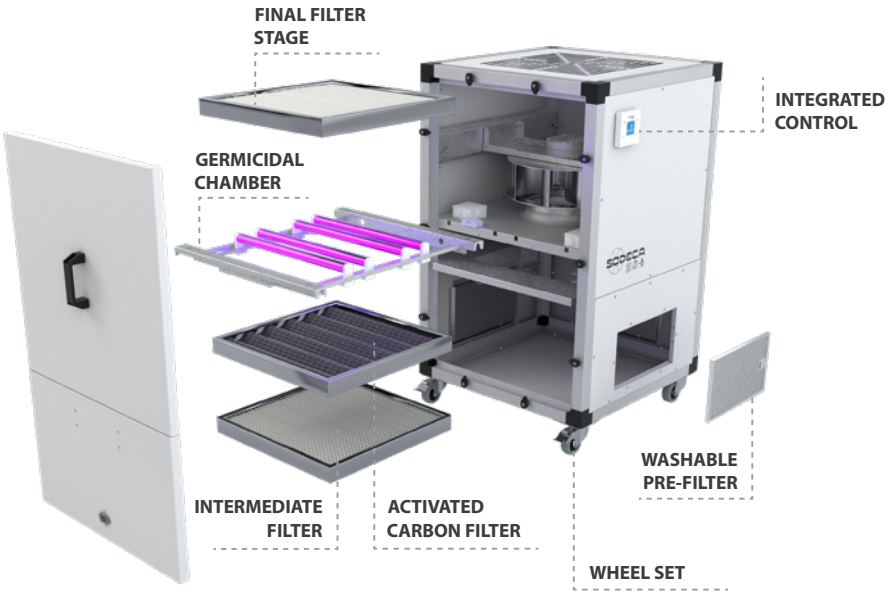
**LOW SOUND LEVEL**
The 25mm thick noise reducing outer panels use bespoke, high quality insulating materials and make this ideal equipment for installation in areas where a low noise level is required.

**DURABILITY**
The outer panels of these units are made of pre-finished sheet metal with 40mm aluminium structural frames to maximise the life of the equipment.

**EASE OF INSTALLATION AND MAINTENANCE**
The access door allows quick access to clean the impeller and replace filters.

F

**CONFIGURABLE FILTRATION STAGES**
In addition to the odour eliminating activated carbon filter, the equipment has two intake pre-filters and one discharge filter, with a range of configurations, all giving the equipment an excellent filtration performance.

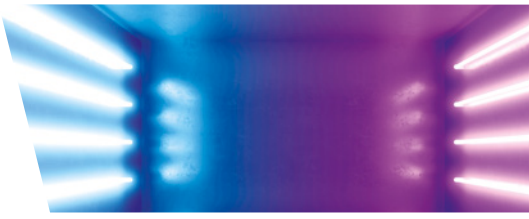



**INTEGRATED CONTROL SYSTEM**
· ON / OFF fan
· Adjustable flow 65% - 100%
· ON/OFF germicidal chamber
· Time control
. Control and alarm of dirty filters
· Automatic operation

**WASHABLE PRE-FILTER**
The first pre-filter catches small, lint type particles, together with larger particles and is dishwasher safe.

CG

**GERMICIDAL CHAMBER**
Depending on model, these purification units can be supplied with an integrated germicidal chamber, using UV ultraviolet lamps "C" range.



# UPM/EC

***Mobile air purifying units, designed for cleaning and purifying indoor air and eliminating odours in any type of room.***

Characteristics:
- Frame made from 40mm profile aluminium.
- Set of wheels.
- Plug & Play system with integrated control.
- Control and dirty filters alarm.
- Outer panels made of 25 mm thick, high quality acoustic insulation, and pre-finished sheet metal.
- Backward curved impeller.
- Dishwasher safe pre-filter.
- Filtration stages, depending on model:
  - F7 + F9
  - F7 + HEPA H14
- Activated carbon filter for odour removal.
- Inspection cover for maintenance and filter replacement.
- Germicidal chamber with UVc (256 nm), depending on model.

Motor:
- High efficiency EC technology, external rotor motor, controllable by 0-10V signal.
- Single phase 200-240V– 50 / 60Hz.
- Air temperature range of -25ºC to +60ºC.

Finish:
- Aluminum profile frame and pre-finished sheet metal with 25mm thick acoustically insulated panels.

On request:
- Particle sensor for automatic monitoring.

## Order code

**UPM/EC — 310 — F7+F9 — CG**

| UPM/EC | 310 | F7+F9 | CG |
|---|---|---|---|
| Mobile air purifying units | Impeller diameter in mm | Filter F7 + F9<br>Filter F7 + HEPA H14 | UVc germicidal chamber |

## Filter characteristics

| Filters | EN 779 *Em* | EN 1822 | ISO 16890 | | | |
|---|---|---|---|---|---|---|
| | | | ISO $ePM_1$ | ISO $ePM_{2,5}$ | ISO $ePM_{10}$ | ISO COARSE |
| F7 | 90% | - | >50% | >65-95% | >85% | - |
| F9 | 95% | - | >80% | >95% | >95% | - |
| HEPA H14 | - | >99,995% | - | - | - | - |

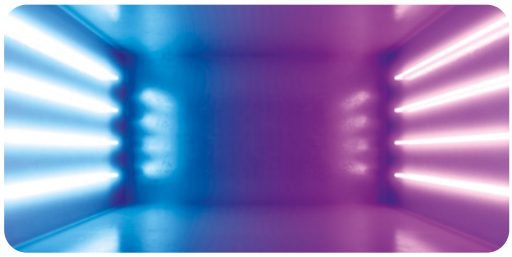
## Technical characteristics

| Model | Recommended effective working area[1] ($m^2$) | | Speed | Maximum power | Power supply | Sound pressure level at 50% of max speed[2] | Maximum flow rate ($m^3/h$) | | Weight |
|---|---|---|---|---|---|---|---|---|---|
| | Filters (F7+F9) | Filters (F7+H14) | (r/min) | (W) | | dB(A) | Filters (F7+F9) | Filters (F7+H14) | (kg) |
| UPM/EC-310 | 65 | 55 | 1920 | 175 | 200-240V 50/60Hz 1Ph | 47 | 550 | 450 | 55 |
| UPM/EC-310/H | 115 | 90 | 2377 | 450 | 200-240V 50/60Hz 1Ph | 55 | 950 | 750 | 57 |
| UPM/EC-400 | 190 | 155 | 1550 | 460 | 200-240V 50/60Hz 1Ph | 47 | 1600 | 1300 | 97 |

[1] Recommended effective working area with a 3-meter-high premises. [2] Radiated sound pressure level in dB (A) at 3 m distance

## Technical characteristics of the UVc germicidal chamberc

Depending on model, these purification units can be supplied with an integral germicidal chamber, using UV ultraviolet lamps “C” in a spectrum of 256 nm, indicated wave amplitude, to inactivate a wide variety of microorganisms by absorbing short wavelength energy through DNA and RNA. For specific types of viruses or bacteria that are affected by the radiation dose in the germicidal chamber, consult the specific document.



| Model | Number of lamps | Electrical power (W) | UVc radiation power (W) | Radiation dose* ($mJ/cm^2$) |
|---|---|---|---|---|
| UPM/EC-310 | 6 | 54 | 16,8 | 6,7 |
| UPM/EC-310/H | 6 | 54 | 16,8 | 4,5 |
| UPM/EC-400 | 4 | 102 | 28 | 5,4 |

*Minimum dose calculated based on flow with F7+H14 filters.

## *Erp. (Energy Related Products)*

Information on Directive 2009/125 / EC downloadable from the SODECA website or QuickFan selection program.

## *Dimensions mm*

| Model | A | B | H |
|---|---|---|---|
| UPM/EC-310 | 542 | 500 | 960 |
| UPM/EC-310/H | 542 | 500 | 960 |
| UPM/EC-400 | 742 | 700 | 1210 |

*Data subject to change without prior notice.

# UPA

## AIR PURIFYING UNITS

CE ACCORDING ErP

EC TECHNOLOGY

- PURIFIES INDOOR AIR
- IMPROVES HEALTH
- CLEANS PARTICLES AND ODOURS
- PERFECT FOR INDUSTRY AND HIGH OCCUPATION PREMISES
- OPTIMAL FOR DATA CENTRES
- SUITABLE FOR PHARMACEUTICAL AND HEALTHCARE INDUSTRIES

HELP TO STOP COVID-19

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CG
WE BET ON UVc TECHNOLOGY TO BEAT THE VIRUS

FCA ACTIVATED CARBON
F9 EFFICIENCY 70%
HEPA 99.95% EFFICIENCY
CG LAMP UVC GERMICIDE

**STAGES OF FILTRATION**

# UPA

***Units specifically designed for cleaning and purification of indoor air, in any type of premises and especially in areas with high occupancy, also suitable for pharmaceutical and healthcare applications.***

Features:
- Plug-fan type fans with EC technology.
- Efficient, adjustable and low noise level equipment.
- Filtration stages according to model
  - First stage of F7 Filtering.
  - Activated carbon filter.
  - Final filter F9.
  - HEPA H14 final filter, 99.95% efficiency.
  - UVc germicidal chamber, depending on order code.
- Control panel with on / off and dirty filters indicator.
- Germicidal chamber operation led indicator.
- Fully removable access door for cleaning and maintenance
- Insulated panels.

Motor:
- High efficiency, external rotor, EC technology motors, incorporating constant flow regulation, with two, pre-adjustable set points.
- Single phase 200-230V– 50 / 60Hz.

Finish:
- Frames made form aluminum section and 25mm insulated panels, pre-finished exterior, galvanized interior.

On demand:
- Drive Module 1 Front grille.
- Drive module with circular ducts.
- Equipped with wheels.

## *Order code*

***UPA — UV — 1500 — F-9 — CG***

| UPA | UV | 1500 | F-9 | CG |
|---|---|---|---|---|
| Air purifying unit | UV: Vertical unit<br>UH: horinzotal unit | Air flow $m^3/h$ | Filter F9<br>HEPA filter H14 | Germicidal chamber UVc |

## *Technical characteristics*

| Model | Recommended effective working area[1] | Maximum flow | | Available pressure | Power supply | Sound level | Fan | Weight |
|---|---|---|---|---|---|---|---|---|
| | ($m^2$) | ($m^3/h$) | (CFM) | (Pa) | (V) | dB(A) | (KW) | (kg) |
| UPA-UV-1500 | 200-350 | 1.500 | 883 | 250 | 200-230V 50/60Hz 1Ph | 47 | 0,76 | 113 |
| UPA-UV-3000 | 300-450 | 3.000 | 1766 | 250 | 200-230V 50/60Hz 1Ph | 51 | 1,35 | 140 |
| UPA-UV-4500 | 450-900 | 4.500 | 2649 | 300 | 200-230V 50/60Hz 1Ph | 55 | 2,7 | 177 |
| UPA-UV-6000 | 900-1.100 | 6.000 | 3531 | 250 | 200-230V 50/60Hz 1Ph | 59 | 5,4 | 215 |
| UPA-UH-1500 | 200-350 | 1.500 | 883 | 250 | 200-230V 50/60Hz 1Ph | 47 | 0,76 | 108 |
| UPA-UH-3000 | 300-450 | 3.000 | 1766 | 250 | 200-230V 50/60Hz 1Ph | 52 | 1,52 | 138 |
| UPA-UH-4500 | 450-900 | 4.500 | 2649 | 250 | 200-230V 50/60Hz 1Ph | 55 | 2,7 | 135 |
| UPA-UH-6000 | 900-1.100 | 6.000 | 3531 | 250 | 200-230V 50/60Hz 1Ph | 59 | 5,4 | 155 |

[1] Recommended area with a 3 meter high premises. * Available pressure with G4 and F9 filter

## *Construction*

**Vertical Unit (UV)**

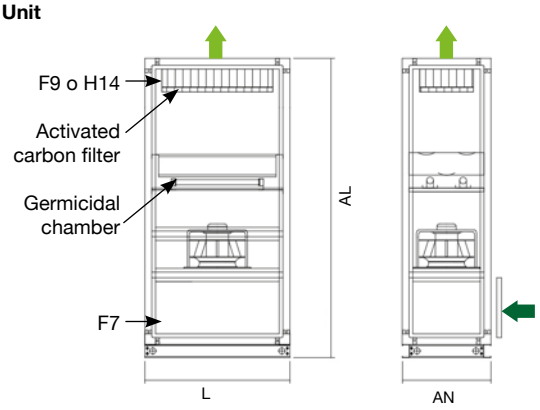
Vertical Unit (UV) ideal for direct use in the rooms being purified, it can also be supplied on request with a drive module with outlet diffusion grille and with wheels if required.

**Horizontal Unit (UH)**

Horizontal Unit (UH) deigned to be installed in ceiling spaces and ducted to the areas where the air needs to be treated.

## *Dimensions mm*

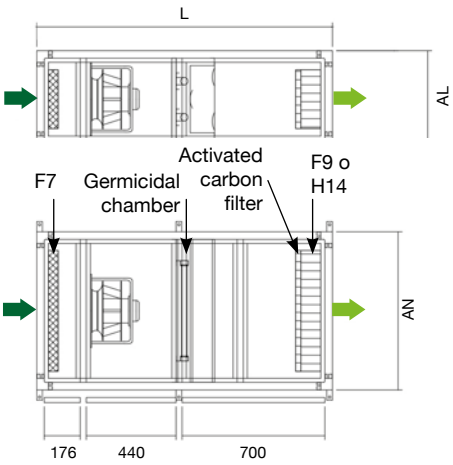
**Vertical Unit**




| Model | L (mm) | AN (mm) | AL (mm) |
|---|---|---|---|
| UPA-UV-1500 | 774 | 474 | 1600 |
| UPA-UV-3000 | 774 | 779 | 1600 |
| UPA-UV-4500 | 1079 | 779 | 1600 |
| UPA-UV-6000 | 1504 | 779 | 1600 |

*Data subject to change without prior notice.

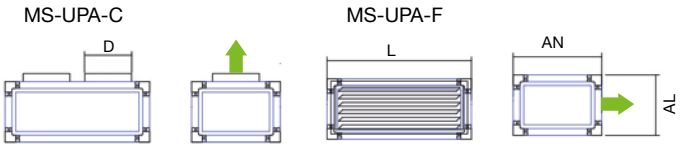
**Horizontal Unit**




| Model | L (mm) | AN (mm) | AL (mm) |
|---|---|---|---|
| UPA-UH-1500 | 1450 | 774 | 479 |
| UPA-UH-3000 | 1450 | 1366 | 479 |
| UPA-UH-4500 | 1450 | 1069 | 779 |
| UPA-UH-6000 | 1450 | 1366 | 779 |

*Data subject to change without prior notice.

**Drive modules**




| Model | L (mm) | W (mm) | H (mm) | D (mm) | Number of ducts | Weight (Kg) |
|---|---|---|---|---|---|---|
| MS-UPA-1500 | 774 | 474 | 324 | 250 | 2 | 25 |
| MS-UPA-3000 | 774 | 779 | 490 | 250 | 4 | 33 |
| MS-UPA-4500 | 1079 | 779 | 490 | 250 | 6 | 42 |
| MS-UPA-6000 | 1504 | 779 | 490 | - | - | 55 |

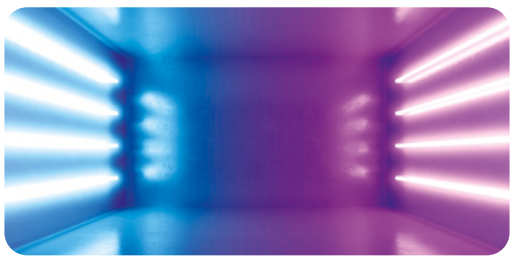
## *Filtered*

These air purification units are equipped with filters capable of removing at least 70% of particles larger than 0.4µm.
The standard model comes with a first G-4 filter stage and a final F-9 filter, it also incorporates as standard, an activated carbon stage, designed to remove stale odours produced during everyday use of the premises.
Depending on model type H14 HEPA filters can be installed with a minimum retention capacity of 99.95% for particles larger than 0.3µm.

| Filters | EN 779 *Em* | EN 1822 | ISO 16890 | | | |
|---|---|---|---|---|---|---|
| | | | ISO ePM$_1$ | ISO ePM$_{2,5}$ | ISO ePM$_{10}$ | ISO COARSE |
| G4 | 90% | - | - | - | - | >90% |
| F7 | 90% | - | >50% | >65-95% | >85% | - |
| F9 | 95% | - | >80% | >95% | >95% | - |
| HEPA H14 | - | >99,995% | - | - | - | - |

## *Technical characteristics of the UVc germicidal lamp*

Depending on model and on request, these purification units can be supplied with an integrated germicidal chamber using UV “C” ultraviolet lamps, in the spectrum of 256 nm wave amplitude to inactivate a wide variety of microorganisms by absorbing short wavelength energy through DNA and RNA.



| Model | Number of lamps | Total electrical power (W) | Total UVc radiation power (W) | Dose ratio* (mJ/cm$^2$) |
|---|---|---|---|---|
| CG-UV-1500 | 3 | 48 | 21 | 4,85 |
| CG-UV-3000 | 7 | 112 | 48 | 5,66 |
| CG-UV-4500 | 4 | 216 | 70 | 5,39 |
| CG-UV-6000 | 14 | 224 | 98 | 5,47 |
| CG-UH-1500 | 3 | 48 | 21 | 5,17 |
| CG-UH-3000 | 2 | 150 | 51 | 6,28 |
| CG-UH-4500 | 4 | 216 | 70 | 5,89 |
| CG-UH-6000 | 14 | 224 | 98 | 6,04 |

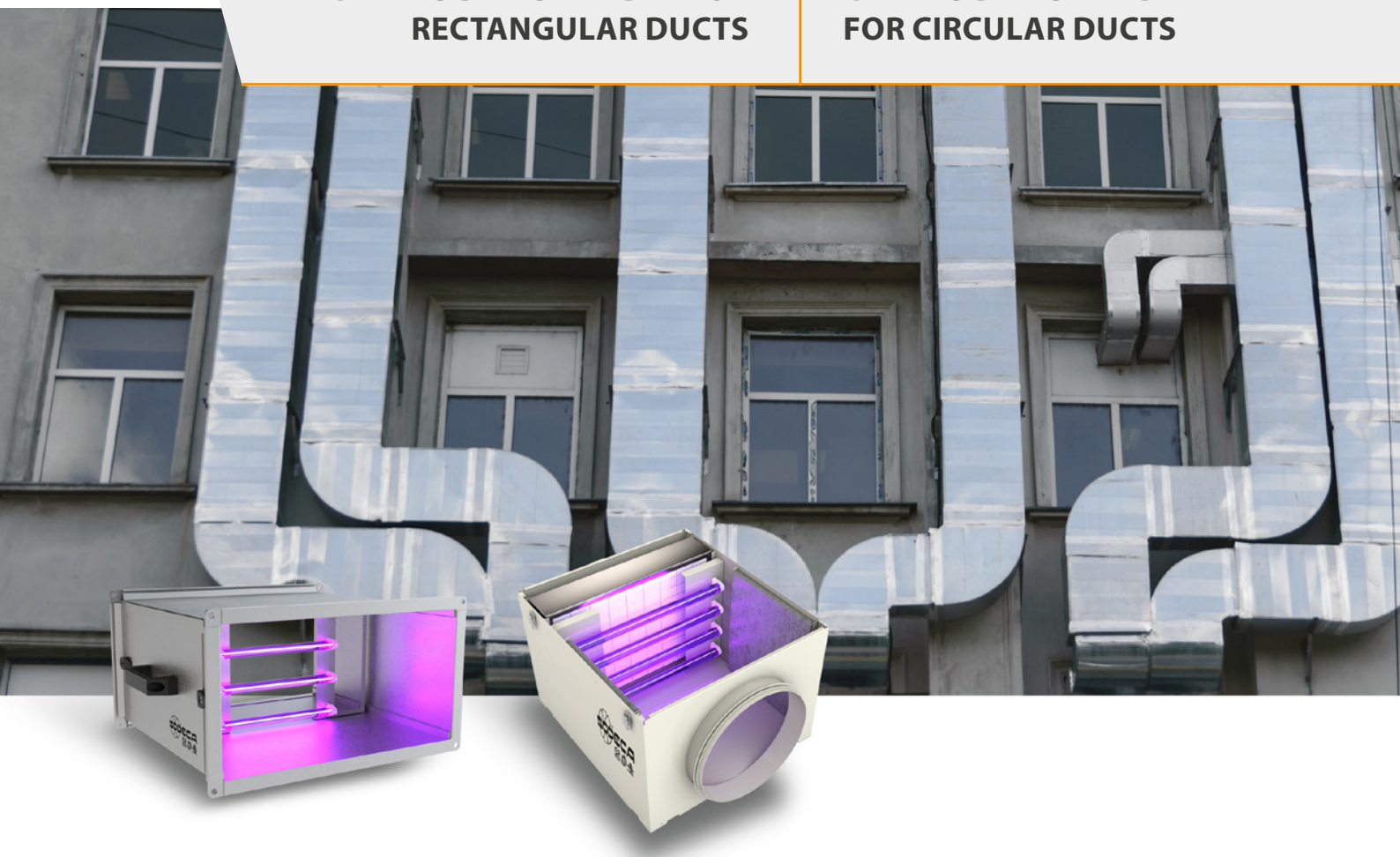
*Minimum dose calculated based on flow with F7 +F9 filters

# CGR-UVC

## GERMICIDAL CHAMBER FOR RECTANGULAR DUCTS

# CG/LP-UVC

## GERMICIDAL CHAMBER FOR CIRCULAR DUCTS



- ELIMINATES VIRUSES AND BACTERIA
- INCREASED INDOOR AIR QUALITY
- IMPROVES HYGIENE CONDITIONS
- FOR EXISTING VENTILATION INSTALLATIONS
- DISINFECTION OF THE THROUGH-AIR

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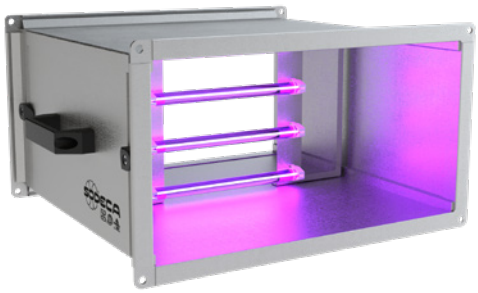
F7 + F9

F7 + HEPA H14

FILTRATION STAGES

# CGR-UVc

***Germicidal chamber without a fan for rectangular ducts equipped with UVc ultraviolet lamps and with the option of including filtration stages. Ideal for installation in existing air conditioning and ventilation systems.***



Characteristics:
- Germicidal chamber with UVc lamps (256 nm).
- Maintenance access panel.
- Easy to install.
- Low profile models for installation in false ceilings.
- Filtration stage options of F7 + F9 or F7 + HEPA H14.
- Filters can be easily and quickly replaced using the guide slots.
- Inlet and outlet flanges allow easy installation in duct work.
- Includes safety features for handling and maintenance of ultraviolet lamps in accordance with standard UNE 0068:2020.

# CG/LP-UVc

***Germicidal chamber without a fan for circular ducts equipped with UVc ultraviolet lamps and with the option of including filtration stages. Ideal for installation in existing air conditioning and ventilation systems.***

Finish:
- CGR-UVc: Anti-corrosive finish on galvanised sheet steel.
- CG/LP-UV: Anti-corrosive finish of polyester resin polymerised at 190 °C, previously degreased with phosphate-free nano-technological treatment.

## *Order code*

***CGR-UVc — 5030 — 0***

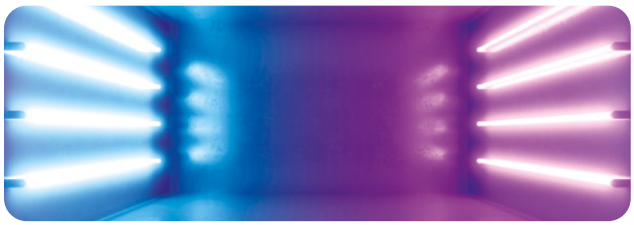
| | | |
|---|---|---|
| Germicidal chamber for rectangular ducts | Duct section | 0: Without filters<br>F7 + F9 filter |

***CG/LP-UVc 315 0***

| | | |
|---|---|---|
| Germicidal chamber for circular ducts | Duct diameter | 0: Without filters<br>F7 + F9 filter<br>F7 + HEPA H14 filter |

## *Technical characteristics of the UVc germicidal chamber*

Depending on the model, these purification units can incorporate a germicidal chamber that utilises UVc ultraviolet lamps at 256nm wave length, which is the optimum amplitude for deactivating most micro-organisms by absorbing short wavelength energy through the DNA and RNA. Refer to the specific document for a list of the types of viruses or bacteria that are affected by the dose of radiation emitted inside the germicidal chamber.

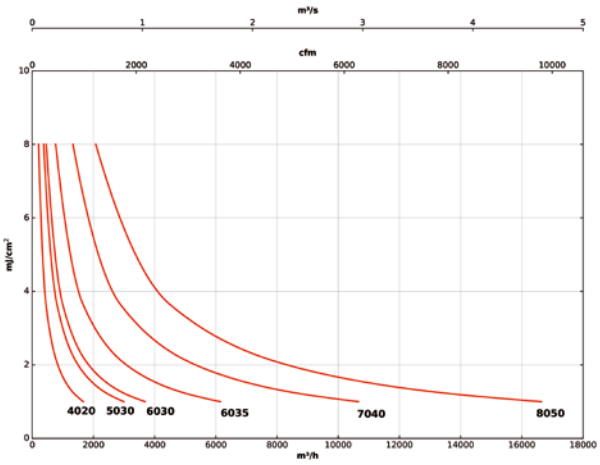


| Model | Number of lamps | Total electric power (W) | Total radiated power UVc (W) |
|---|---|---|---|
| CGR-UVc-4020 | 4 | 36 | 11.2 |
| CGR-UVc-5030 | 6 | 54 | 16.8 |
| CGR-UVc-6030 | 6 | 54 | 16.8 |
| CGR-UVc-6035 | 4 | 102 | 28 |
| CGR-UVc-7040 | 6 | 153 | 42 |
| CGR-UVc-8050 | 6 | 153 | 42 |

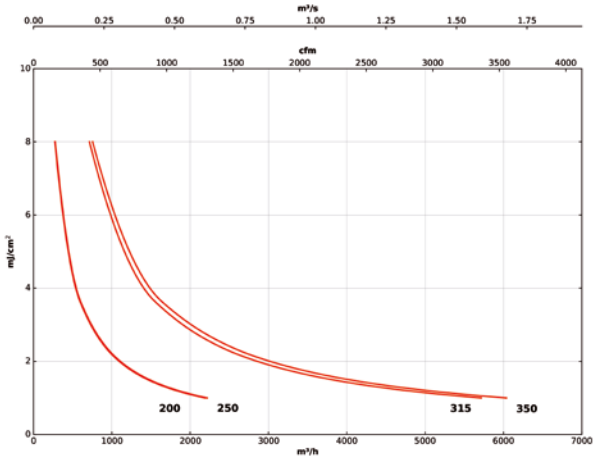
| Model | Number of lamps | Total electric power (W) | Total radiated power UVc (W) |
|---|---|---|---|
| CG/LP-UVc-200 | 4 | 36 | 11.2 |
| CG/LP-UVc-250 | 4 | 36 | 11.2 |
| CG/LP-UVc-315 | 4 | 102 | 28 |
| CG/LP-UVc-350 | 4 | 102 | 28 |

## *Dose calculation*

### CGR-UVc




### CG/LP-UVc




## *Technical characteristics with filter*

| Model | Maximum flow rate (m³/h) Filters (F7 + F9) | Weight (kg) |
|---|---|---|
| CGR-UVc-4020 | 1833 | 16 |
| CGR-UVc-5030 | 3247 | 20 |
| CGR-UVc -6030 | 3896 | 28 |
| CGR-UVc -6035 | 4545 | 32 |
| CGR-UVc -7040 | 6061 | 40 |
| CGR-UVc -8050 | 8658 | 50 |

| Model | Maximum flow rate (m³/h) Filters (F7 + F9) | Filters (F7 + H14) | Weight (kg) |
|---|---|---|---|
| CG/LP-UVc-200 | 590 | 430 | 6.1 |
| CG/LP-UVc-250 | 660 | 560 | 9.2 |
| CG/LP-UVc-315 | 1035 | 850 | 10.4 |
| CG/LP-UVc-350 | 1550 | 1270 | 12.5 |

## *Characteristics of the filters*

| Filters | EN 779 *Em* | EN 1822 | ISO 16890 | | |
|---|---|---|---|---|---|
| | | | ISO $ePM_1$ | ISO $ePM_{2.5}$ | ISO $ePM_{10}$ |
| F7 | 90% | - | >50% | >65-95% | >85% |
| F9 | 95% | - | >80% | >95% | >95% |
| HEPA H14 | - | >99.995% | - | - | - |

## *Accessories*

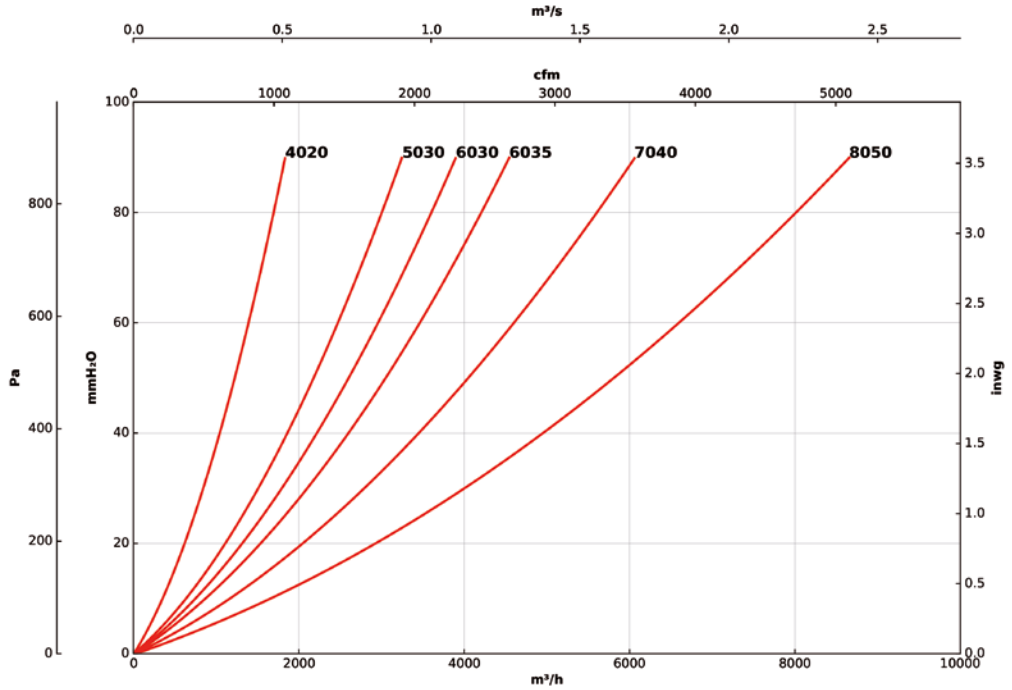
FILTERS | SI-PRESOSTATO | SI-PRESIÓN | SI-MF | SI-CO2 IND | PRESSURE SENSOR | ACE | TEJ | VIS

## *Filter load loss*

Q = Flow rate in $m^3/h$, $m^3/s$ and cfm. Pe = Static pressure in $mmH_2O$, Pa and inwg.

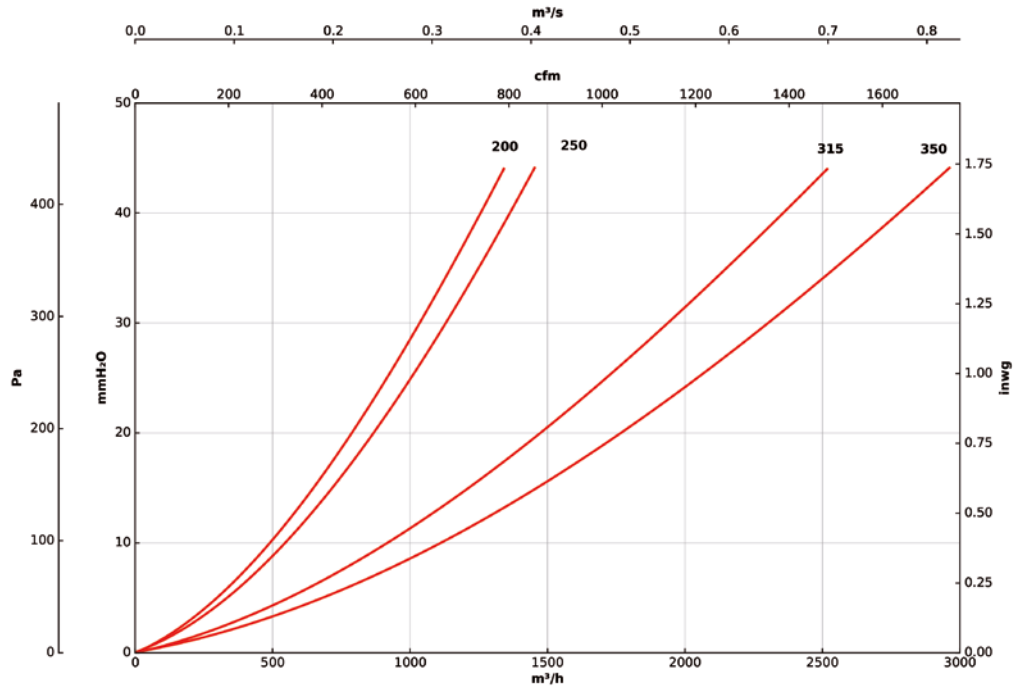
### CGR-UVc

**F7 + F9**




### CG/LP-UVc

**F7 + F9**

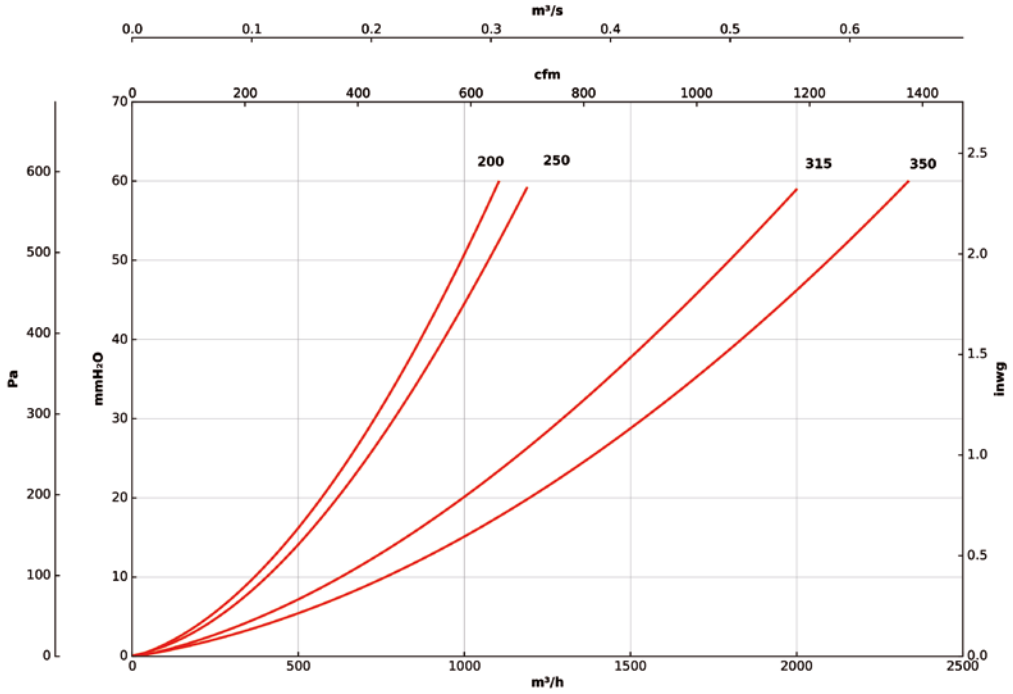


## *Filter load loss*

Q = Flow rate in $m^3/h$, $m^3/s$ and cfm. Pe = Static pressure in $mmH_2O$, Pa and inwg.

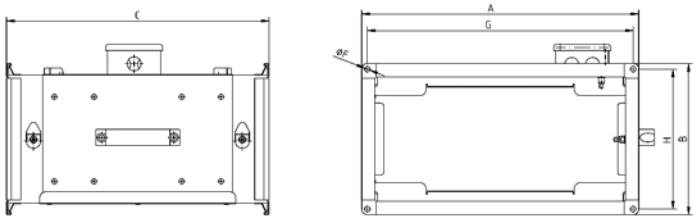
### CG/LP-UVc

**F7 + HEPA H14**



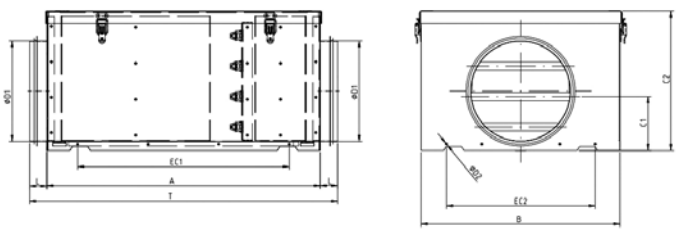

## *Dimensions mm*

### CGR-UVc



| Model | A | B | C | ØF | G | H |
|---|---|---|---|---|---|---|
| CGR-UVc-4020 | 440 | 240 | 415 | Ø9 | 420 | 220 |
| CGR-UVc-5030 | 540 | 340 | 495 | Ø9 | 520 | 320 |
| CGR-UVc -6030 | 640 | 340 | 610 | Ø9 | 620 | 320 |
| CGR-UVc -6035 | 640 | 390 | 610 | Ø9 | 620 | 370 |
| CGR-UVc -7040 | 740 | 440 | 705 | Ø9 | 720 | 420 |
| CGR-UVc -8050 | 840 | 540 | 825 | Ø9 | 820 | 520 |

### CG/LP-UVc



| Model | A | B | C1 | C2 | ØD1 | L |
|---|---|---|---|---|---|---|
| CG/LP-UVc-200 | 543 | 395 | 117 | 275 | 198.5 | 34 |
| CG/LP-UVc-250 | 550 | 420 | 140 | 294 | 248.5 | 48 |
| CG/LP-UVc-315 | 567 | 421 | 175 | 372 | 313.5 | 58 |
| CG/LP-UVc-350 | 599 | 610 | 200 | 411 | 353.5 | 56 |

| Model | ØD2 | EC1 | EC2 | T |
|---|---|---|---|---|
| CG/LP-UVc-200 | 4.3 | 420 | 360 | 611.5 |
| CG/LP-UVc-250 | 4.3 | 420 | 320 | 646.5 |
| CG/LP-UVc-315 | 4.3 | 450 | 439 | 683 |
| CG/LP-UVc-350 | 4.3 | 468 | 525 | 711 |

# CG/FILTER-UVC

## AIR PURIFYING UNITS WITHOUT FAN

- PURIFIES INDOOR AIR
- UVC GERMICIDAL CHAMBER
- DIFFERENT STAGES OF FILTERING
- 25 MM ACOUSTIC CASING
- FOR EXISTING AIR CONDITIONING AND VENTILATION INSTALLATIONS

HELP TO STOP COVID-19

INTERNATIONAL IUVA ULTRAVIOLET ASSOCIATION

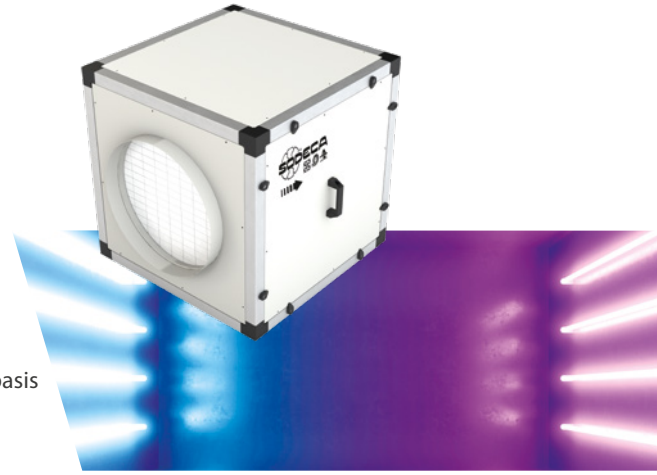
CG
WE BET ON UVc TECHNOLOGY TO BEAT THE VIRUS

F7 + F9

F7 + HEPA H14

FILTRATION STAGE

The CG / FILTER-UVC air purifying units without fan have been designed to be used in existing air conditioning and ventilation installations, to clean and purify air, in high occupancy areas with high demands for soundproofing and versatility.



F

**FILTRATION STAGES**
They incorporate two stages of F7 + F9 or F7 + HEPA H14 filtering depending on the model, as well as an activated carbon filter for the elimination of odours, providing a combination with excellent filtration performance.

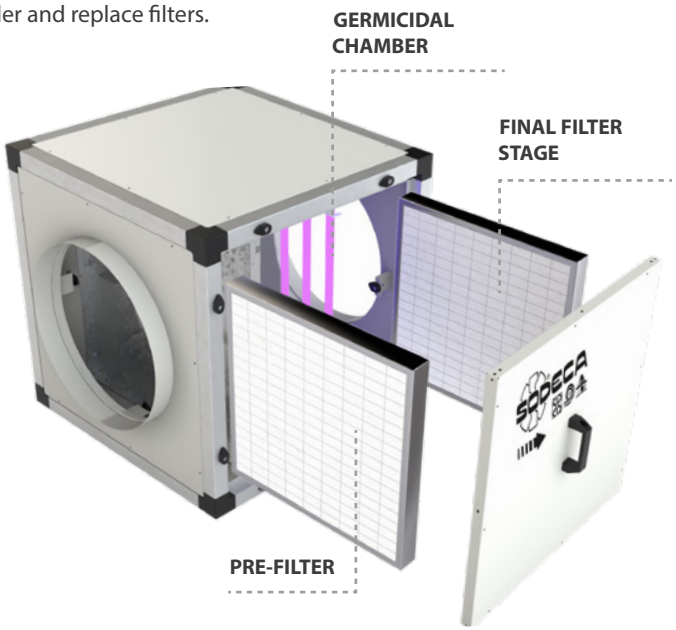
CG

**GERMICIDAL CHAMBER**
Depending on the model, these purification units can integrate a germicidal chamber, built on the basis of UVc ultraviolet lamps.

**LOW SOUND LEVEL**
The 25mm thick noise reducing outer panels use bespoke, high quality insulating materials and make this ideal equipment for installation in areas where a low noise level is required.

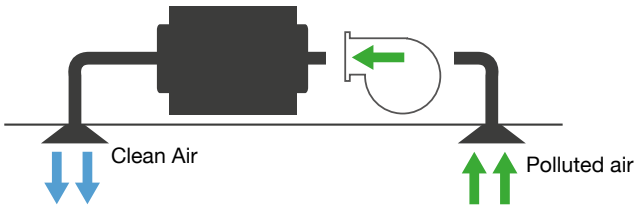
**EASE OF INSTALLATION AND MAINTENANCE**
The access door allows quick access to clean the impeller and replace filters.

**DURABILITY**
The outer panels of these units are made of pre-finished sheet metal with aluminium structural frames to maximise the life of the equipment, allowing it to be installed in outdoors corrosive areas. The installation of a rain cover is recommended to prevent entry of water.

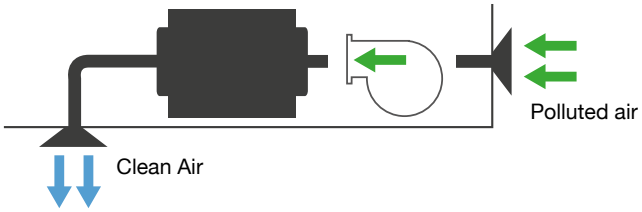



## *Example of application*

Indoor air purification




Capturing and purifying outdoor air



# CG/FILTER-UVc

***Air purifying units for circular ducts, with 25mm acoustic panels for noise reduction, without fan.***

Characteristics:
- Frame made from 40mm profile aluminium.
- Outer panels made of 25 mm thick, high quality acoustic insulation, and pre-finished sheet metal.
- Standard flanges on intake and discharge sides to facilitate installation in ducts.
- Filtration stages according to model:
  - F7 + F9
  - F7 + HEPA H14
  - Activated carbon filter odour removal
- Germicidal chamber with UVc light (256 nm), depending on model.
- Inspection cover for maintenance and replacement of filters.

Finish:
- Aluminum profile frame and pre-finished sheet metal with 25mm thick acoustically insulated panels.

On demand:
- Automatic control system.

## *Order code*

***CG/FILTER/UVc — 315 — F7+F9 — CG***

| CG/FILTER/UVc | 315 | F7+F9 | CG |
|---|---|---|---|
| Purifying units without fan | Flange diameter in mm | Filters (F7+F9) Filters (F7+H14) | Germicidal UVc chamber |

## *Technical characteristics*

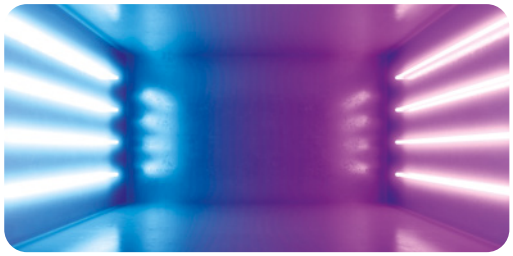
| Model | Maximum flow ($m^3/h$) | | Weight |
|---|---|---|---|
| | Filters (F7+F9) | Filters (F7+H14) | (kg) |
| CG/FILTER/UVc-315 | 470 | 415 | 30 |
| CG/FILTER/UVc-355 | 700 | 550 | 30 |
| CG/FILTER/UVc-450 | 1800 | 1400 | 62 |
| CG/FILTER/UVc-500 | 2350 | 2050 | 105 |

## *Filters characteristics*

| Filters | EN 779 *Em* | EN 1822 | ISO 16890 | | | |
|---|---|---|---|---|---|---|
| | | | ISO $ePM_1$ | ISO $ePM_{2,5}$ | ISO $ePM_{10}$ | ISO COARSE |
| F7 | 90% | - | >50% | >65-95% | >85% | - |
| F9 | 95% | - | >80% | >95% | >95% | - |
| HEPA H14 | - | >99,995% | - | - | - | - |

## *Technical characteristics of the UVc germicidal chamber*

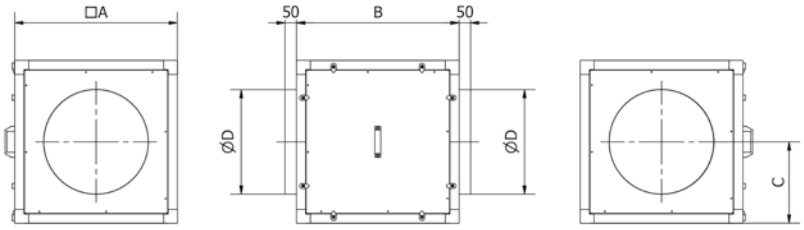
Depending on model, these purification units can integrate a germicidal chamber, built on the basis of UVc ultraviolet lamps in a 256 nm spectrum, a wave amplitude indicated to inactivate a wide variety of microorganisms by absorbing short wavelength energy through DNA and RNA. For specific types of viruses or bacteria that are affected by the radiation dose from the germicidal chamber, consult the specific document.



| Model | Number of lamps | Electrical power (W) | UVc radiation power (W) | Radiation dose* (m.l / cm2) |
|---|---|---|---|---|
| CG/FILTER/UVc-315 | 6 | 54 | 16,8 | 7,3 |
| CG/FILTER/UVc-355 | 6 | 54 | 16,8 | 5,5 |
| CG/FILTER/UVc-450 | 4 | 102 | 28 | 5,0 |
| CG/FILTER/UVc-500 | 6 | 153 | 42 | 6,6 |

*Minimum dose calculated based on maximum flow rate with F7HEPA H14 filters.

## Dimensions mm




| Model | A | B | C | ØD |
|---|---|---|---|---|
| CG/FILTER/UVc-315 | 500 | 500 | 250 | 315 |
| CG/FILTER/UVc-355 | 500 | 500 | 250 | 355 |
| CG/FILTER/UVc-450 | 700 | 700 | 350 | 450 |
| CG/FILTER/UVc-500 | 900 | 900 | 450 | 500 |

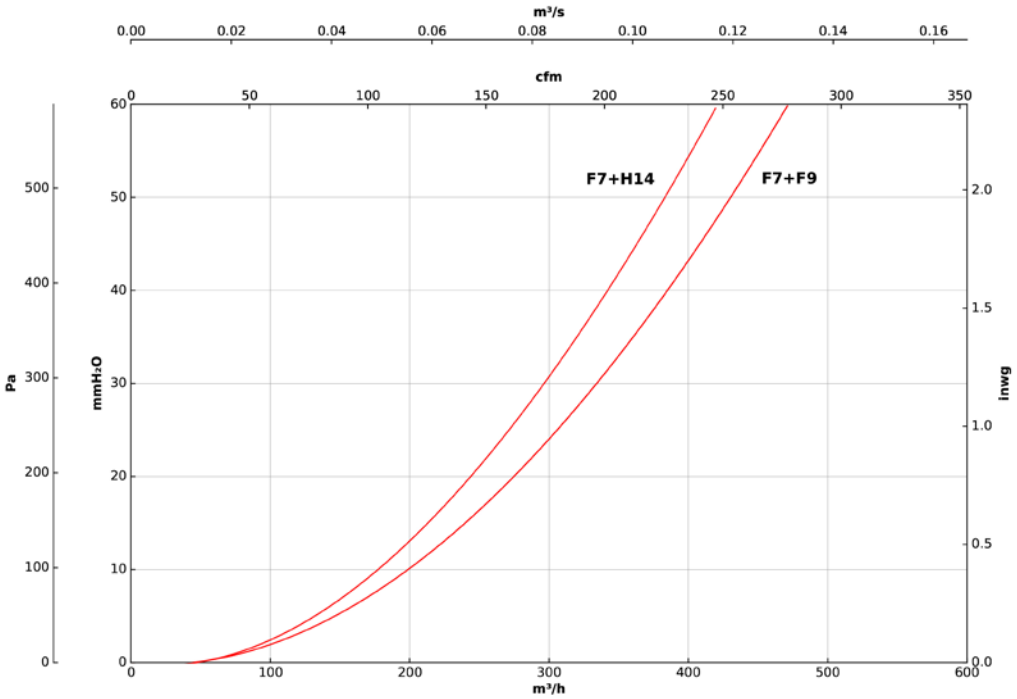
## Accesorios

FILTERS | SI-PRESOSTATO | SI-PRESION | SI-MF | SI-CO2 IND | PRESSURE PROBE | ACE | PT | TEJ | VIS

## Characteristic curves

Q= Flow in $m^3/h$, $m^3/s$ and cfm. Pe= Static pressure in mmH2O, Pa and inwg.

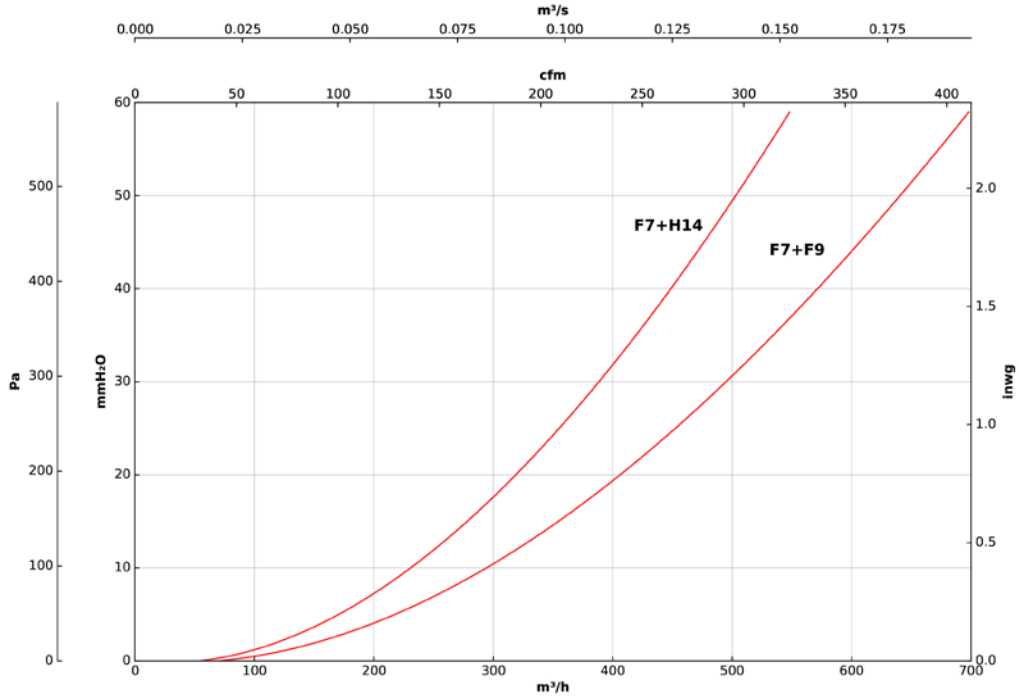
### CG/FILTER/UVc-315



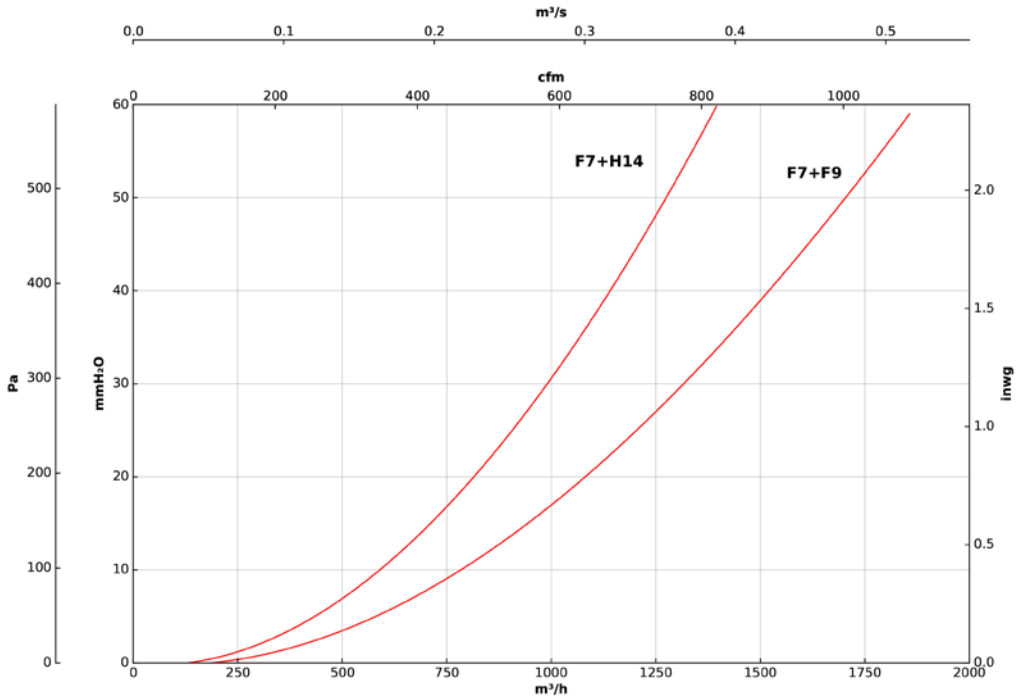
## *Characteristic curves*

Q= Flow in $m^3/h$, $m^3/s$ and cfm. Pe= Static pressure in mmH2O, Pa and inwg.

### CG/FILTER/UVc-355



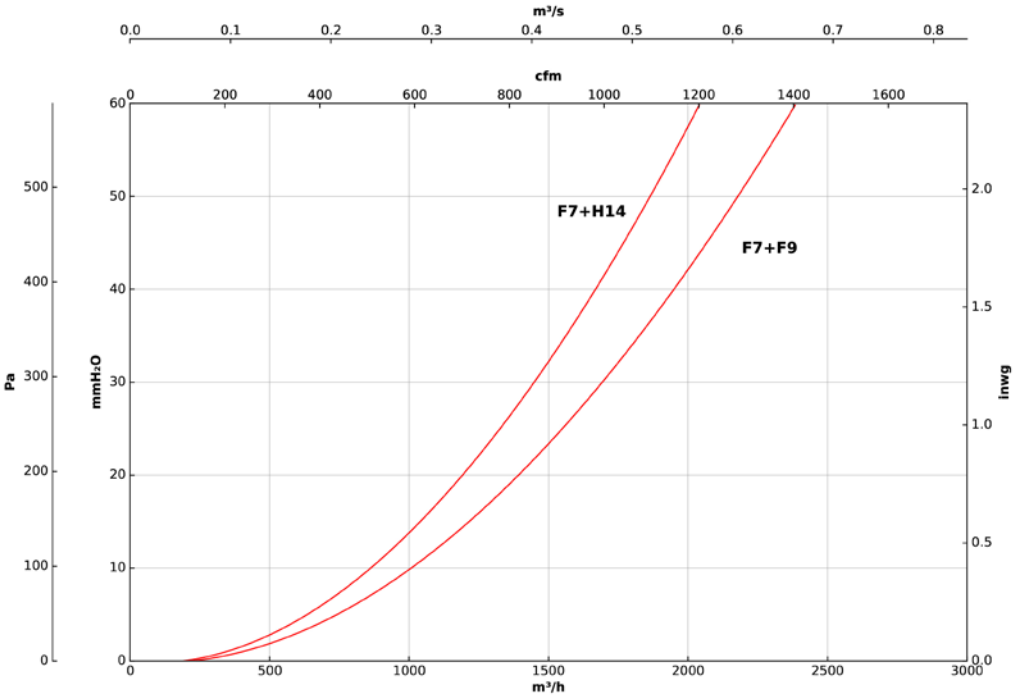

### CG/FILTER/UVc-450



## *Characteristic curves*

Q= Flow in $m^3/h$, $m^3/s$ and cfm. Pe= Static pressure in mmH2O, Pa and inwg.

**CG/FILTER/UVc-500**



Ref. 01/2021

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