

NEW TECHNOLOGIES FOR INDOOR AIR HYGIENE AND QUALITY (I.A.Q)



- For the removal of pollutants and smells with elevated efficiency
- To regenerate the ionic equilibrium
- To turn sites of work and leisure into a real oasis of well-being





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What are the advantages by installing the UC ?

- high level of well-being
- optimal kvalitet på inomhusluften
- negligible noise level (dBA)
- easy and quick installation
- very low power consumption
- easy maintenance
- excellent reliability
- increased personnel concentration and productivity



In what way does the UC produce IAQ?

- through optimal filtering of micro particles (PM10) and air suspended fumes
- through efficient reduction of air suspended micro organisms (bacteria, yeast, mould)
- through constant exchange of air in order to control the level of CO2 and other gases
- through reestablishment of the natural equilibrium of positive and negative ions

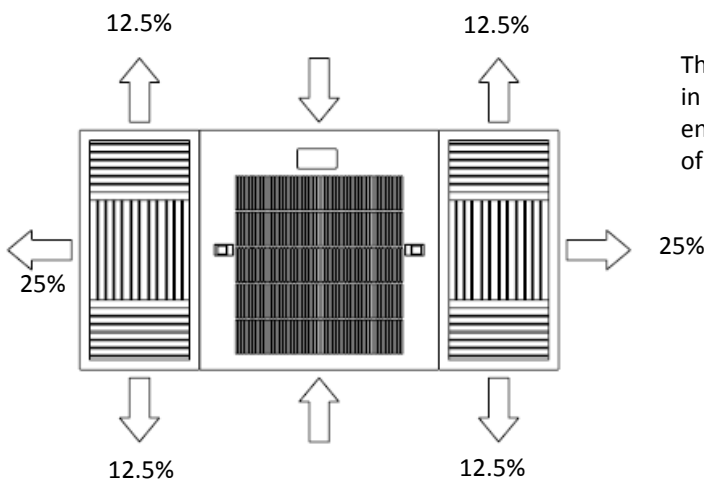
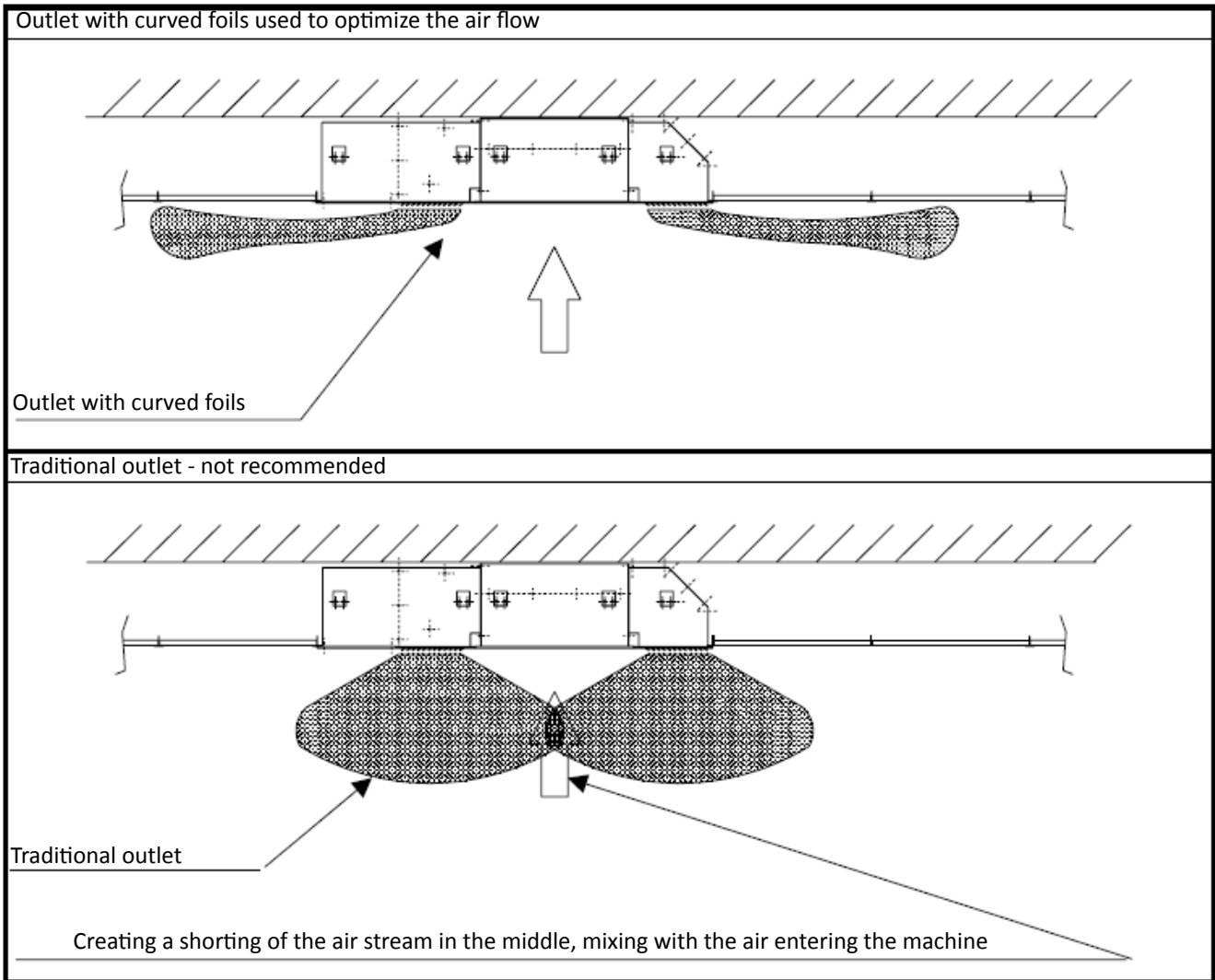


Why install the UC?

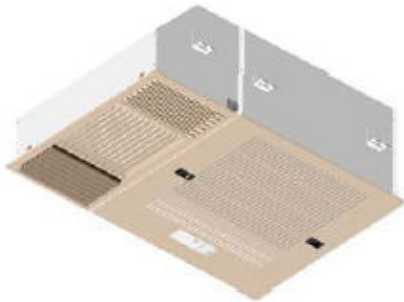
- to efficiently and rapidly filter out micro particles and fumes ranging 0,1 - 10 µm (PM10)
- to breathe clean air also when the outside air is polluted
- to dramatically improve the degree of well-being normally present in indoor areas
- to reduce the typical indoor background smells
- to stop the aerial transmission of contagious diseases (colds, flue etc)
- to guarantee the hygiene
- can be fitted in any modular ceiling system of 600 x 600
- capacity 1460 m³/h + 290 m³/h external air
- scientific air quality measurements available before and after UC installation

The UC-system is available in 24 different configurations

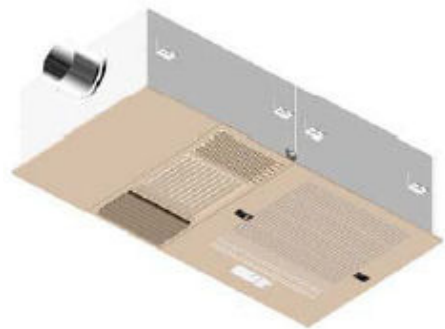
The outlets are equipped with curved foils with air directions. The particular design of the foils permits an optimal distribution pattern of the air, causing a so called "coanda" effect, also avoiding short circuiting in the centre area. Do not replace these outlets with models from other manufacturers.



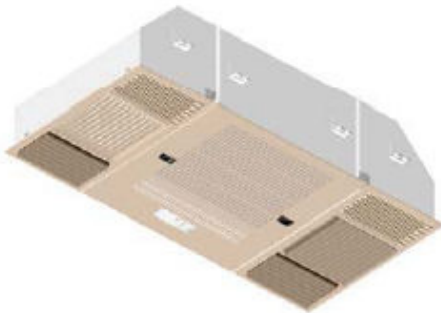
The UC outlet permits launching the air in three directions, covering the whole environment. When necessary, a group of foils may be closed.



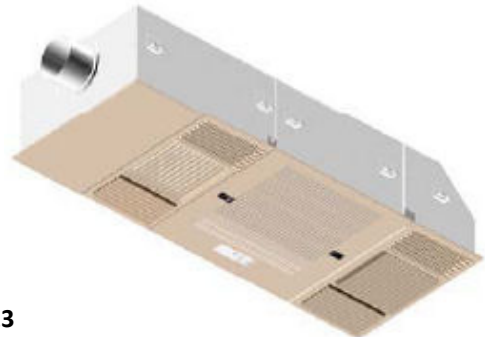
UC12
with single outlet unit



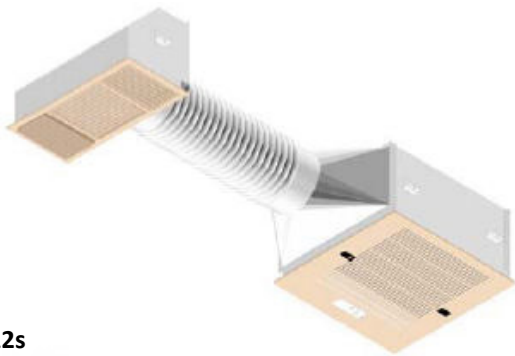
UC13
with re oxygenising unit



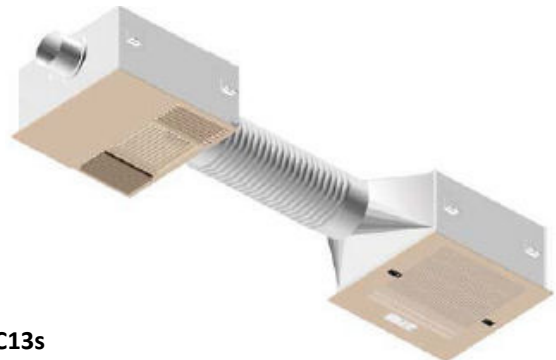
UC122
with two outlet units



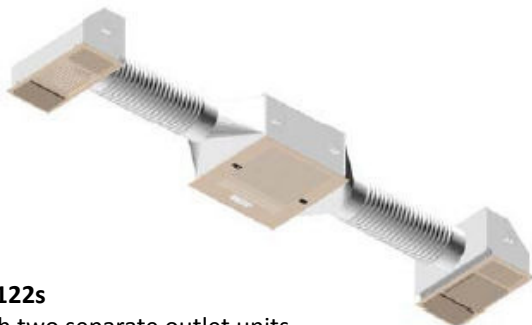
UC123
with both outlet unit and re oxygenising unit



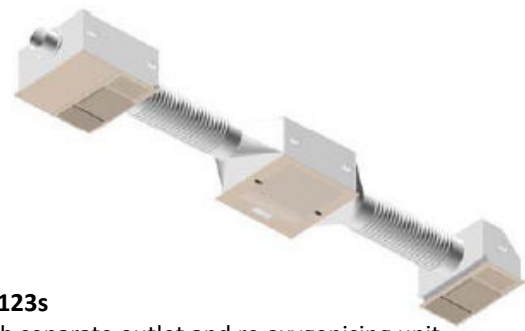
UC12s
with separate single outlet unit



UC13s
with separate re oxygenising unit



UC122s
with two separate outlet units



UC123s
with separate outlet and re oxygenising unit

Ceiling machines must be installed at a height from the ground between 2.8 and 3.5 metres.

UC VOLUMETRIC COVERAGE, THE MEASURE OF IAQ LEVEL AND WELL BEING



LEGEND

- = insufficient
- = sufficient
- = acceptable
- = good
- = very good
- = excellent

With smokers present

Without smokers present

Mod		Volume max m3	n. max persons	IAQ measured	IAQ sensational	Volume max m3	n. max persons	IAQ measured	IAQ sensational
UC12	N.S. AFC BASIC	126	21	●● ●● ●	○○○ ○○ ○○	158	30	●●● ○○ ●●	○○○ ○○ ○○
UC13	N.S. AFC BASIC	126	21	●●●● ●●● ●●	○○○○○ ○○○ ○○	158	30	●●●●● ●●●● ●●●	○○○○○ ○○○ ○○○
UC12s	N.S. AFC BASIC	100	16	●●● ●● ●	○○○ ○○ ○	122	20	●●● ●●● ●●	○○○ ○○ ○○
UC13s	N.S. AFC BASIC	100	16	●●●● ●●● ●●	○○○○○ ○○○○ ○○○	122	20	●●●●● ●●●● ●●●	○○○○○ ○○○○ ○○○
UC122	N.S. AFC BASIC	145	24	●●● ●● ●	○○○ ○○ ○	181	30	●●●● ●●● ●●●	○○○ ○○ ○○
UC123	N.S. AFC BASIC	145	24	●●●●● ●●●● ●●	○○○○○ ○○○○ ○○○	181	30	●●●●● ●●●●● ●●●	○○○○○ ○○○○○ ○○○
UC122s	N.S. AFC BASIC	129	21	●●● ●● ●	○○○ ○○ ○	161	26	●●●● ●●● ●●	○○○ ○○○ ○○
UC123s	N.S. AFC BASIC	129	21	●●●●● ●●●● ●●●	○○○○○ ○○○○○ ○○○	161	26	●●●●● ●●●●● ●●●●	○○○○○ ○○○○○ ○○○○

OPTIONAL EQUIPMENT

The plants can be supplied with equipment according to the following table.

Basic System:

The air has to be checked at regular intervals. The cleaning process takes place in an electrostatic filter.

AFC System

The filtration is controlled by a microprocessor. Production in the filter is adapted to the degree of pollution.

At 85% saturation, an optical signal gives indication when the filter should be cleaned.

To protect electronic components the system will automatically shut down if the requested operation is not performed correctly.

All the user needs to do is to select the appropriate fan speed.

Nature system

This system goes one step further by combining the effects of electrostatic cleaning with a system that restores the ionic balance.

The system's built-in room vitalizer is particularly suitable for areas with increased exposure to tobacco smoke, computers and all sorts of electrical appliances.

OPTIMAL APPLICATION OF THE REVITALIZER

The **NATURE SYSTEM®** guarantees restoration of the conditions of purity and ionic re-equilibrium in all contaminated environments. You get the maximum results with the **NATURE SYSTEM®** if you first identify the particular type of problem the Revitalizer must solve.

For this reason, eight types of Revitalizer suitable for specific applications have been defined.

Type A: suitable for premises such as bars, casinos, discos, pubs, amusement arcades, etc.

Type B: suitable for premises such as restaurants, pizzeria, cafes, ice-cream parlours, butcher shops, etc.

Type C: suitable for premises such as shops and stores for food, clothing, electrical appliances, etc.

Type D: suitable for premises such as offices, computer rooms, professional offices, waiting rooms, laboratories, etc.

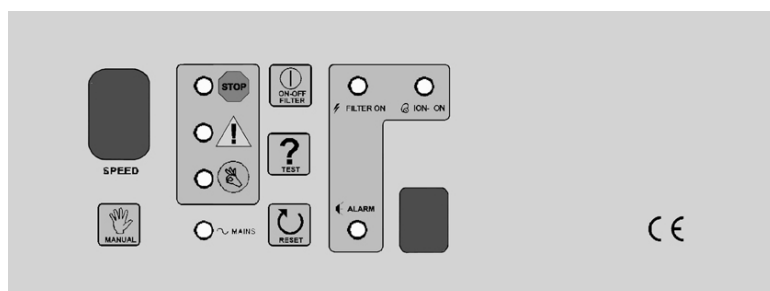
Type E: suitable for premises such as hospital wards, and for treating illnesses of the respiratory tract, allergies, etc.

Type F: suitable for environments in built-up areas and with high environmental pollution

Type G: suitable for environments with high radon concentrations

Type H: suitable for garden nurseries, flower shops and flower-growing in general

CONTROL PANEL



All information regarding the operating status of the machine is displayed on the control panel.

The control panel allows the user to:

- select the air flow
- activate/deactivate revitalisation
- constantly control all the functions relating to operation filtration efficiency, alarm situation)

See below for manual operation and visual control of the operating conditions.

DISPLAY

When the machine works normally, the single-figure display shows the operating air flow (0-1-2-3). If, on the other hand, the letter F appears, this means that operation of the electrostatic cell is not correct.



The reason may be a deposit of pollutant on the surface of the ionisation wires (see paragraph "ELECTRONIC CIRCUIT ALARM SIGNALS").

If the letter F appears together with the indication ALARM, the operation of the Revitaliser does not stop, however it is an indication of efficiency reduction.



RECEIVER



The receiver permits the reception of the signal coming from the infrared remote control unit to obtain speed changes, activation of the night-time deodorization phase or switching off of the apparatus; if one of the four remote control buttons has been pressed, the Led flashes for about 1 second.

MANUAL, TEST, ON-OFF FILTER AND RESET BUTTONS

The MANUAL button allows the air flow to be modified manually (0-1-2-3); the setting is memorised and maintained even if there is a power failure. The machine can be turned off by turning to flow 0 (fan off).



Pressing the button indicated, a test on the operation of the electronic circuit signals is carried out. The air purifier is in perfect operating conditions only if all the Leds go on. Otherwise call our service network.



The ON/OFF button is for activating/deactivating the filtration or revitalisation function. It is used when you need to completely dry the filtering unit after washing, or to use the machine for the ventilation function only.



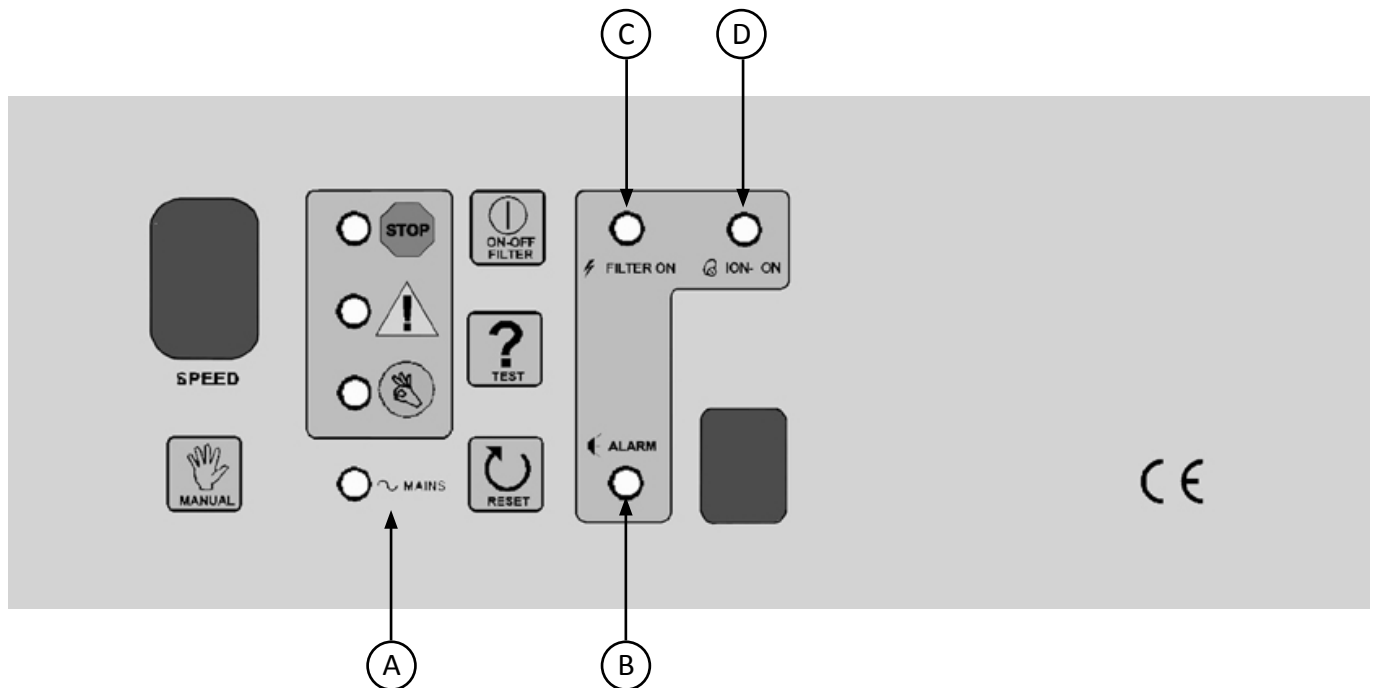
The RESET button is for turning off the ALARM signal if the circuit protection device has tripped as a result of a continuous discharge or short circuit in the electrostatic cells. If the alarm persists even after resetting, call the technical service.



OPERATION OF THE MACHINE

These four LEDs indicate the operating status of the environmental Revitalizer:

- A-MAINS (green Led): power on (constant)
- B - larm (red Led): when this is on, it means that there is a problem with the high-efficiency filtration unit. All the filtration and revitalisation functions are stopped (call the technical service).
- C - Filter ON (yellow Led): when this is on, it means that filtering is on.
- D - ION-ON (yellow Led): when this is on, it means that revitalisation is on (ionic re-equilibrium).



FILTERING STATUS

The three Leds indicate the state of filtering efficiency and therefore only go on when filtration is activated; only one Led lights up at a time. The indications on filtering status are:

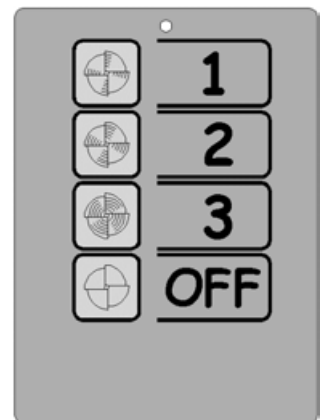


- MAINTENANCE**
(red Led): saturated filter to be cleaned or replaced (maintenance); in this case all the filtering and revitalisation functions are stopped.
- PRE-ALARM**
(yellow Led): efficient filtering but not at the maximum levels (pre-alarm)
- FILTER OK**
(green Led): high filtering efficiency

INFRARED REMOTE CONTROL UNIT

The remote control unit allows you to control the Revitalizer, modifying the air flow and activating night-time revitalisation from a distance of about 6-7 metres. The following functions are provided:

- 1st FAN SPEED key: sets the “maintenance” flow (room half empty)
- 2nd FAN SPEED key: sets the “normal use” flow (room half-full)
- 3rd FAN SPEED key: sets the “emergency” flow (room crowded)
- OFF key: turns off the air purifier



The fan speed of the re-oxygenizing unit is controlled by the the filter circuit unit, which is related to the fan speed selected for the filter.

For specific needs, it is possible to modify the performance of the re-oxygenizing unit by connecting the brown cable (6) to one of the other available terminals: white, red, orange.



Fan speed	% air through re oxygenizing	Cable colour	Recommended cases of use
1	12%	White	The temperature on the outside is very different from the inside, and volume of air to introduce should be kept to minimum.
2	19%	Red	Rooms with few occupants.
3	27%	Grey	Standard configuration.
4	33% - 19%	Orange	The ducting connecting the re oxygenizing unit to the external air inlet is very long and the resistance in the ducting requires more fan power. The resulting air being provided depends on the resistance of the ducting.

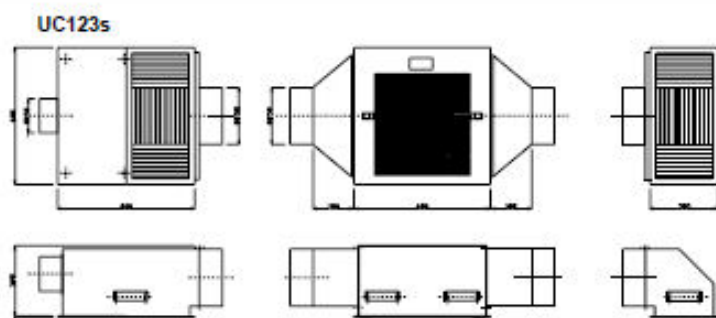
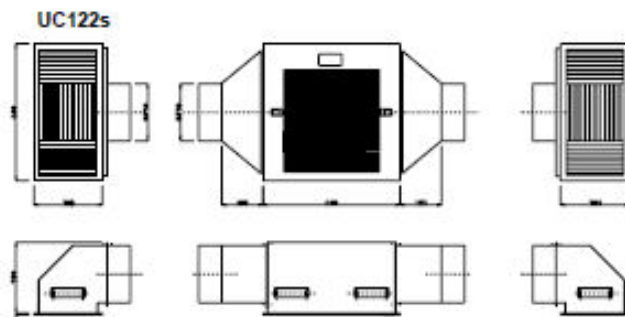
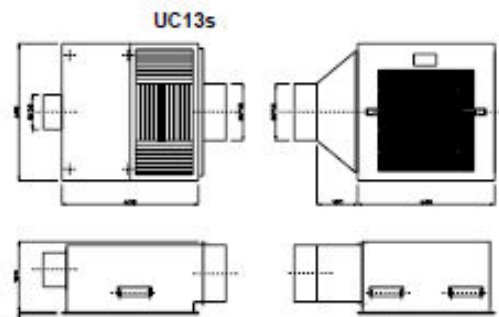
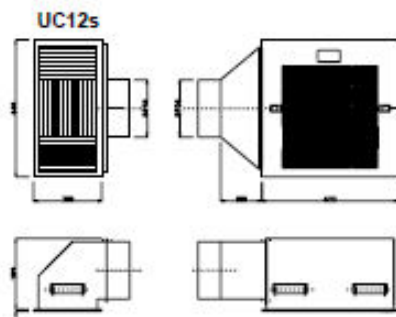
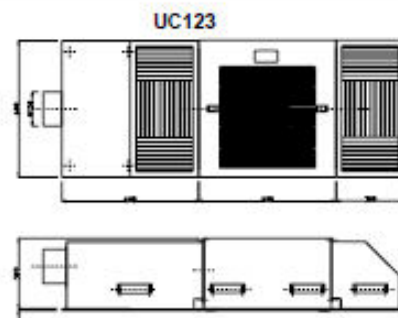
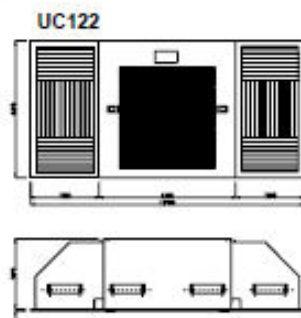
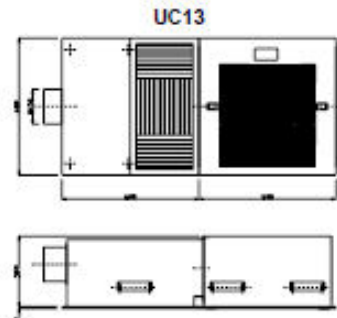
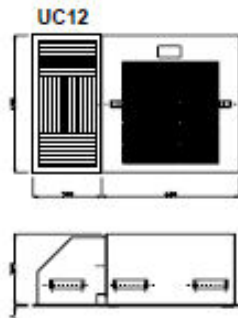
Operation:

Point the remote control towards the control panel, taking care that you are in line with it at a distance no greater than 6-7 metres.

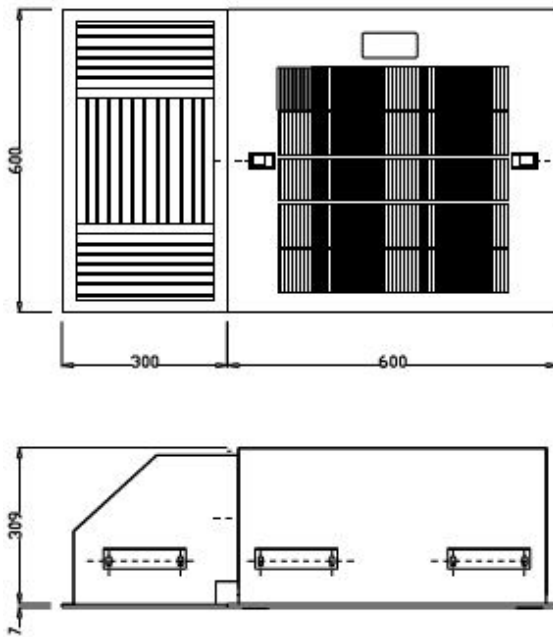
When one of the four keys is pressed, the red LED at the top of the remote control unit goes on to indicate that transmission is in progress.

Almost at the same time, the red LED located in the receiver of the control panel flashes, indicating that the signal has been received.

The infrared transmitter is powered by a 9-volt battery, type PP3 (transistor).



MODULAR AIR CLEANERS SERIES UC



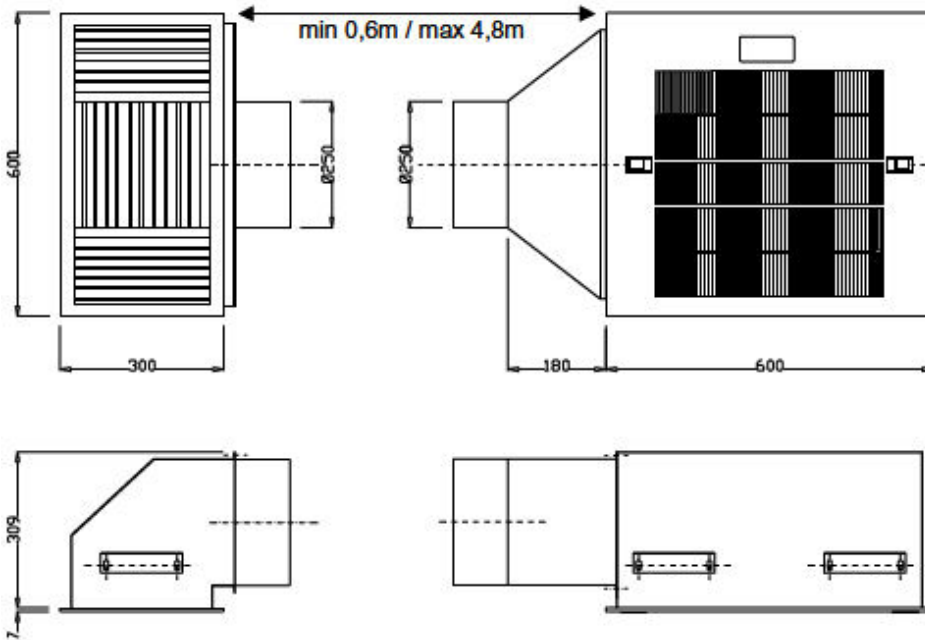
Model: **UC12**
(only cleaning)



with remote control

Model UC12		1° Speed	2° Speed	3° Speed
Air Quantity (recycling)		660 m³/h	1040 m³/h	1261 m³/h
Air Quantity (introduced from external)		no	no	no
Noise level		44 dB	54 dB	58.5 dB
Nature System	Pollutant			
Efficiency (EN779)	PM10 (µg/m³)	98.95%	97.80%	97.20%
Efficiency (EN779)	PM2.5 (µg/m³)	92.00%	87.25%	85.00%
Efficiency	anti-bacterial	88.00%	82.00%	78.50%
Emission of negative ions		yes	yes	yes
Odor elimination		yes	yes	yes
AFC	Pollutant			
Efficiency (EN779)	PM10 (µg/m³)	98.95%	97.80%	97.20%
Efficiency (EN779)	PM2.5 (µg/m³)	92.00%	87.25%	85.00%
Efficiency	anti-bacterial	55.00%	50.00%	45.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no
Basic	Pollutant			
Efficiency (EN779)	PM10 (µg/m³)	97.40%	96.60%	95.80%
Efficiency (EN779)	PM2.5 (µg/m³)	91.00%	86.50%	83.50%
Efficiency	anti-bacterial	30.00%	25.00%	20.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

MODULAR AIR CLEANERS SERIES UC



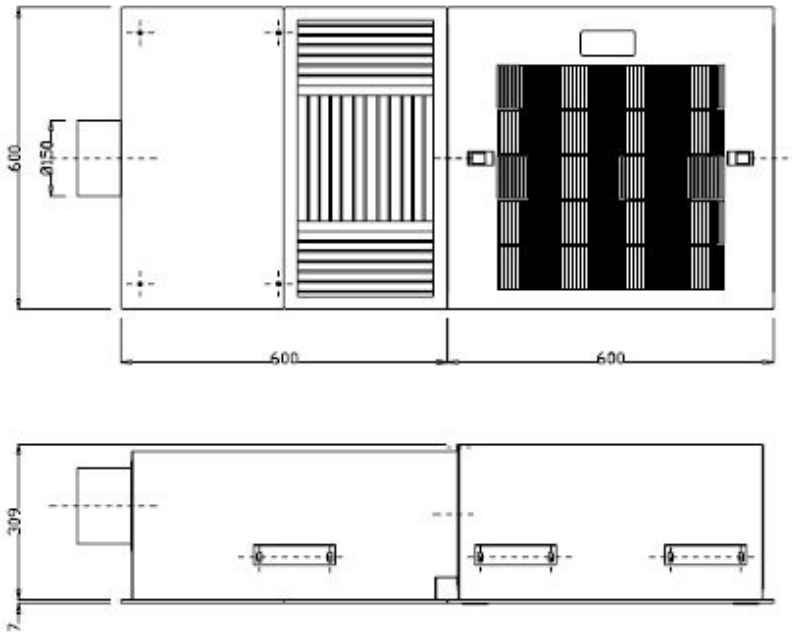
Model: **UC12s**
(only cleaning)



with remote control

Model UC12s		1° Speed	2° Speed	3° Speed
Air Quantity (recycling)		494 m ³ /h	782 m ³ /h	982 m ³ /h
Air Quantity (introduced from external)		no	no	no
Noise level		44 dB	53.5 dB	58 dB
Nature System	Pollutant			
Efficiency (EN779)	PM10 (µg/m ³)	99.15%	98.70%	97.80%
Efficiency (EN779)	PM2.5 (µg/m ³)	91.00%	86.00%	82.00%
Efficiency	anti-bacterial	88.00%	82.00%	78.50%
Emission of negative ions		yes	yes	yes
Odor elimination		yes	yes	yes
AFC	Pollutant			
Efficiency (EN779)	PM10 (µg/m ³)	99.15%	98.70%	97.80%
Efficiency (EN779)	PM2.5 (µg/m ³)	91.00%	86.00%	82.00%
Efficiency	anti-bacterial	55.00%	50.00%	45.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no
Basic	Pollutant			
Efficiency (EN779)	PM10 (µg/m ³)	97.60%	97.50%	96.40%
Efficiency (EN779)	PM2.5 (µg/m ³)	90.00%	85.25%	80.50%
Efficiency	anti-bacterial	30.00%	25.00%	20.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

MODULAR AIR CLEANERS SERIES UC



Model: **UC13**
(cleaning plus introduced external air)



with remote control

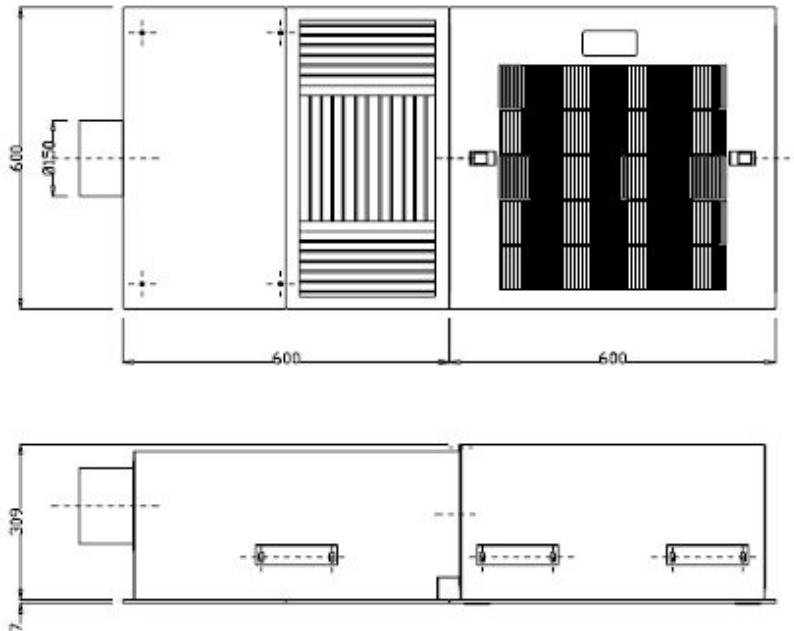
Model UC13	1° Speed	2° Speed	3° Speed
Air Quantity (recycling)	660 m ³ /h	1040 m ³ /h	1261 m ³ /h
Air Quantity (introduced from external)	100 m ³ /h	180 m ³ /h	270 m ³ /h
Noise level	47 dB	57 dB	61.5 dB

Nature System	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	98.95%	97.80%	97.20%
Efficiency (EN779)	PM2.5 (µg/m ³)	92.00%	87.25%	85.00%
Efficiency	anti-bacterial	88.00%	82.00%	78.50%
Emission of negative ions		yes	yes	yes
Odor elimination		yes	yes	yes

AFC	Pollutant	1° Speed	2° Speed	3° Speed
Effektivitet (EN779)	PM10 (µg/m ³)	98.95%	97.80%	97.20%
Effektivitet (EN779)	PM2.5 (µg/m ³)	92.00%	87.25%	85.00%
Effektivitet	anti-bacterial	55.00%	50.00%	45.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

Basic	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	97.40%	96.60%	95.80%
Efficiency (EN779)	PM2.5 (µg/m ³)	91.00%	86.50%	83.50%
Efficiency	anti-bacterial	30.00%	25.00%	20.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

MODULAR AIR CLEANERS SERIES UC



Model: **UC13s**
(cleaning plus introduced
external air)



with remote control

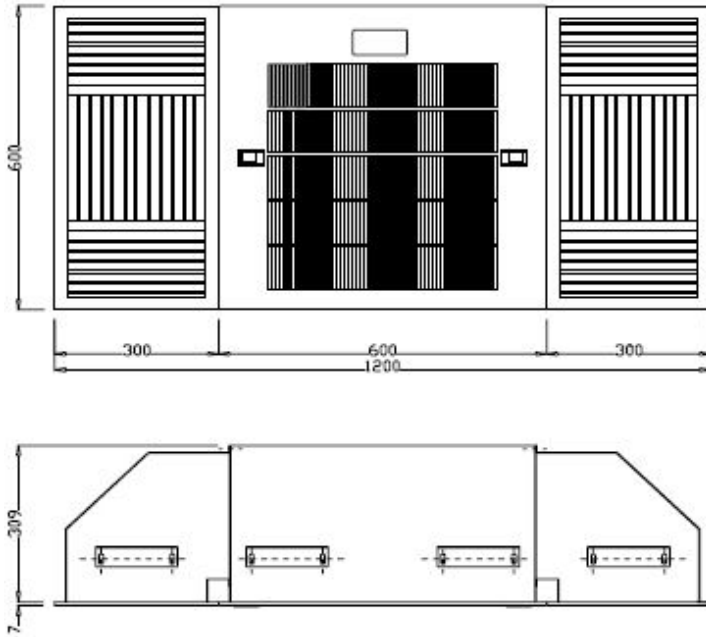
Model UC13s	1° Speed	2° Speed	3° Speed
Air Quantity (recycling)	500 m ³ /h	780 m ³ /h	1000 m ³ /h
Air Quantity (introduced from external)	100 m ³ /h	180 m ³ /h	270 m ³ /h
Noise level	47 dB	56.5 dB	61 dB

Nature System	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	99.15%	98.20%	97.60%
Efficiency (EN779)	PM2.5 (µg/m ³)	92.25%	87.80%	85.90%
Efficiency	anti-bacterial	88.00%	82.00%	78.50%
Emission of negative ions		yes	yes	yes
Odor elimination		yes	yes	yes

AFC	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	99.15%	98.20%	97.60%
Efficiency (EN779)	PM2.5 (µg/m ³)	92.25%	87.80%	85.90%
Efficiency	anti-bacterial	55.00%	50.00%	45.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

Basic	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	97.60%	96.90%	96.10%
Efficiency (EN779)	PM2.5 (µg/m ³)	91.20%	86.80%	83.90%
Efficiency	anti-bacterial	30.00%	25.00%	20.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

MODULAR AIR CLEANERS SERIES UC



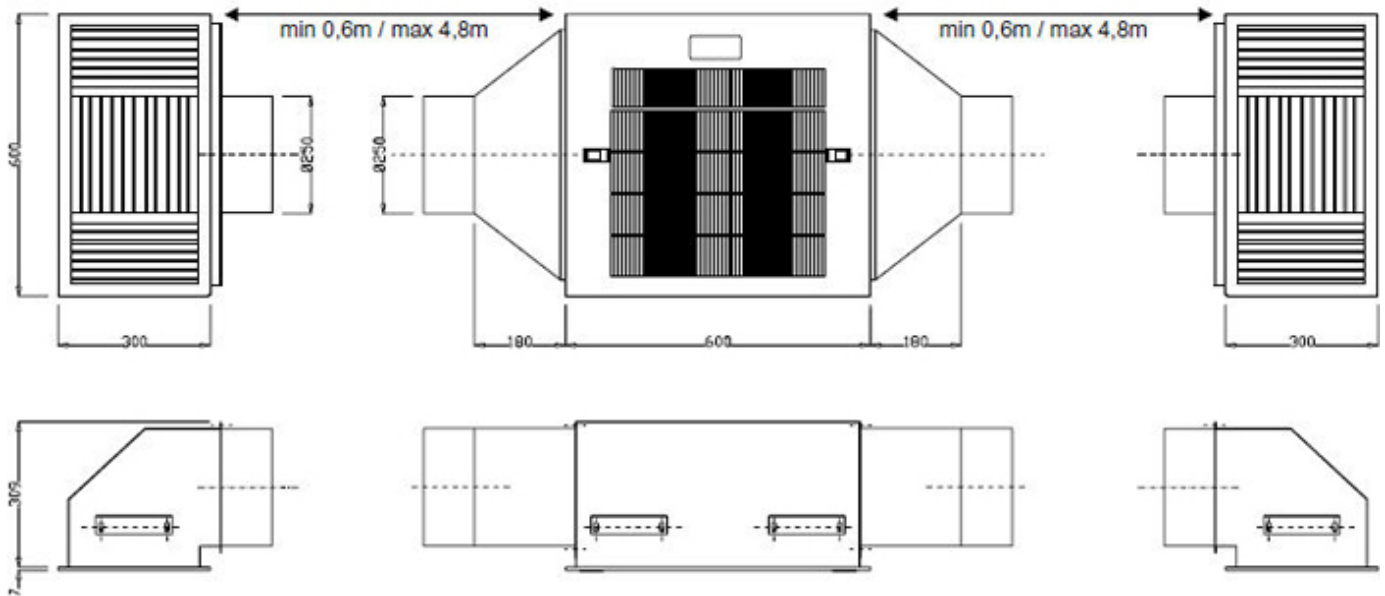
Model: **UC122**
(only cleaning)



with remote control

Model UC122		1° Speed	2° Speed	3° Speed
Air Quantity (recycling)		820 m ³ /h	1260 m ³ /h	1450 m ³ /h
Air Quantity (introduced from external)		no	no	no
Noise level		44 dB	53 dB	58 dB
Nature System	Pollutant			
Efficiency (EN779)	PM10 (µg/m ³)	98.15%	97.20%	96.75%
Efficiency (EN779)	PM2.5 (µg/m ³)	85.00%	78.50%	75.00%
Efficiency	anti-bacterial	88.00%	82.00%	78.50%
Emission of negative ions		yes	yes	yes
Odor elimination		yes	yes	yes
AFC	Pollutant			
Efficiency (EN779)	PM10 (µg/m ³)	98.15%	97.20%	96.75%
Efficiency (EN779)	PM2.5 (µg/m ³)	85.00%	78.50%	75.00%
Efficiency	anti-bacterial	55.00%	50.00%	45.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no
Basic	Pollutant			
Efficiency (EN779)	PM10 (µg/m ³)	96.60%	96.00%	95.30%
Efficiency (EN779)	PM2.5 (µg/m ³)	84.00%	77.40%	73.50%
Efficiency	anti-bacterial	30.00%	25.00%	20.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

MODULAR AIR CLEANERS SERIES UC



Model: **UC122s**

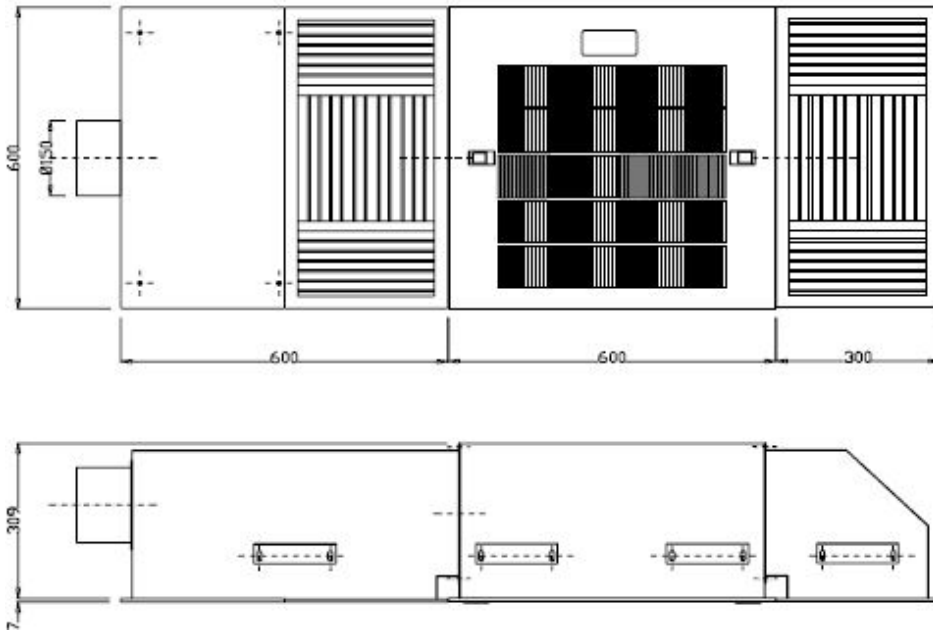
(only cleaning)



with remote control

Model UC122s	1° Speed	2° Speed	3° Speed
Air Quantity (recycling)	698 m ³ /h	1078 m ³ /h	1289 m ³ /h
Air Quantity (introduced from external)	no	no	no
Noise level	44 dB	53 dB	58 dB
Nature System			
Efficiency (EN779)			
Efficiency (EN779)	98.85%	97.52%	97.20%
Efficiency	87.00%	81.00%	78.50%
Efficiency	88.00%	82.00%	78.50%
Emission of negative ions	yes	yes	yes
Odor elimination	yes	yes	yes
AFC			
Efficiency (EN779)			
Efficiency (EN779)	98.85%	97.52%	97.20%
Efficiency	87.00%	81.00%	78.50%
Efficiency	55.00%	50.00%	45.00%
Emission of negative ions	no	no	no
Odor elimination	no	no	no
Basic			
Efficiency (EN779)			
Efficiency (EN779)	97.30%	96.30%	95.80%
Efficiency	86.00%	95.50%	83.50%
Efficiency	30.00%	25.00%	20.00%
Emission of negative ions	no	no	no
Odor elimination	no	no	no

MODULAR AIR CLEANERS SERIES UC



Model: **UC123**
(cleaning plus introduced external air)



with remote control

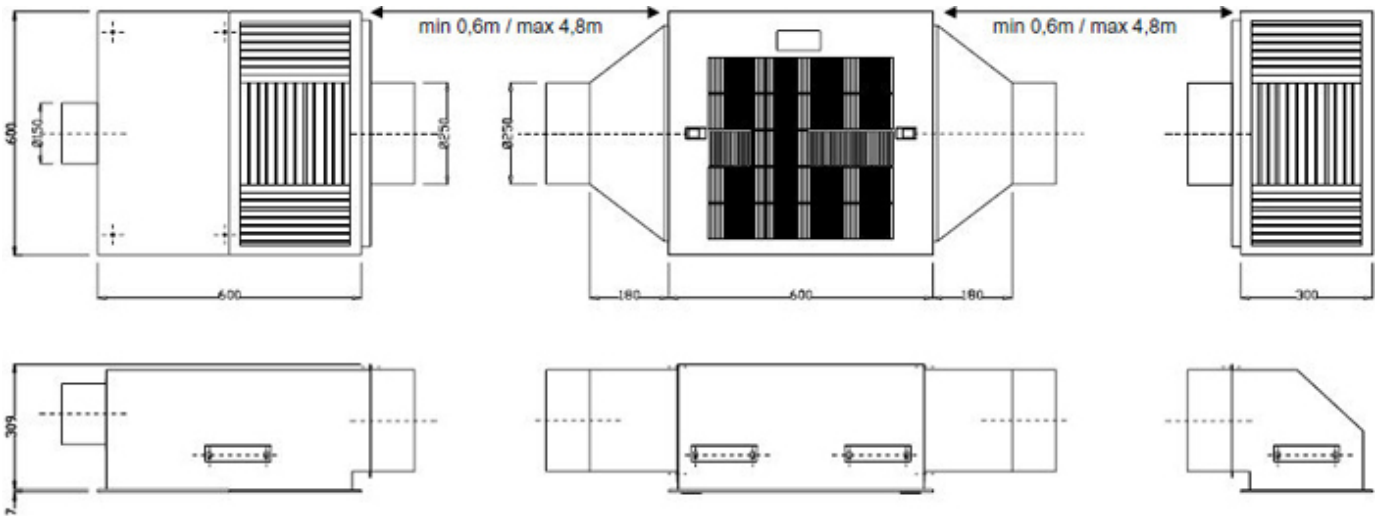
Model UC123	1° Speed	2° Speed	3° Speed
Air Quantity (recycling)	820 m ³ /h	1260 m ³ /h	1450 m ³ /h
Air Quantity (introduced from external)	100 m ³ /h	180 m ³ /h	270 m ³ /h
Noise level	47 dB	56 dB	61 dB

Nature System	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	98.15%	97.20%	96.75%
Efficiency (EN779)	PM2.5 (µg/m ³)	85.00%	78.50%	75.00%
Efficiency	anti-bacterial	88.00%	82.00%	78.50%
Emission of negative ions		yes	yes	yes
Odor elimination		yes	yes	yes

AFC	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	98.15%	97.20%	96.75%
Efficiency (EN779)	PM2.5 (µg/m ³)	85.00%	78.50%	75.00%
Efficiency	anti-bacterial	55.00%	50.00%	45.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

Basic	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	96.60%	96.00%	95.30%
Efficiency (EN779)	PM2.5 (µg/m ³)	84.00%	77.40%	73.50%
Efficiency	anti-bacterial	30.00%	25.00%	20.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

MODULAR AIR CLEANERS SERIES UC



Model: **UC123s**
(cleaning plus introduced external air)



with remote control

Model UC123s	1° Speed	2° Speed	3° Speed
Air Quantity (recycling)	698 m ³ /h	1078 m ³ /h	1289 m ³ /h
Air Quantity (introduced from external)	100 m ³ /h	180 m ³ /h	270 m ³ /h
Noise level	47 dB	56 dB	61 dB

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Efficiency (EN779)	PM2.5 (µg/m ³)	87.00%	81.00%	78.50%
Efficiency	anti-bacterial	88.00%	82.00%	78.50%
Emission of negative ions		yes	yes	yes
Odor elimination		yes	yes	yes

AFC	Pollutant	1° Speed	2° Speed	3° Speed
Efficiency (EN779)	PM10 (µg/m ³)	98.85%	97.52%	97.20%
Efficiency (EN779)	PM2.5 (µg/m ³)	87.00%	81.00%	78.50%
Efficiency	anti-bacterial	55.00%	50.00%	45.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no

Basic	Pollutant	1° Speed	2° Speed	3° Speed
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Efficiency	anti-bacterial	30.00%	25.00%	20.00%
Emission of negative ions		no	no	no
Odor elimination		no	no	no