RESIDENTIAL SOLUTIONS

expansion® electronic

BETTER AIR FOR A BETTER QUALITY OF LIFE

UC SERIES

UC1200

DESCRIPTION

The UC1200 series was designed in order to improve the characteristics and quality of the air in residential and commercial surroundings and in the workplace. The installation method is the strong point of this series of products. Thanks to their compact size, in fact, they can be attached to false ceilings very quickly and easily. The ergonomic and elegant line, combined with its simple construction, make it seems an integral part of the furnishings. At the same time, these installation methods make all maintenance operations very quick and easy.

The UC1200 series is available in eight different versions, some of which change integrated external air. As they can be installed anywhere, they become real and proper oases of well-being, improving the perceived comfort of users. It is therefore very advantageous to install this series of machines in the workplace where a comfortable environment and clean air are effective requirements for people who spend most of their time in closed areas.

The infrared remote control, standard supplied, is used to select one of the three machine operating speeds just with a press of the button.

TECHNOLOGIES

OUR THREE LEVELS OF TECHNOLOGY

NATURE SYSTEM®

NATURE SYSTEM® technology incorporates the most complete and evolved air treatment system, as can be found in the RIVITALIZZATORE®.
Given that the atmosphere contains a variable number of sources of pollution, with the RIVITALIZZATORE® the daytime or night-time operating cycle can be selected.
After the operating function has been set, it can automatically control and manage all the operating phases required to achieve the finest air quality. In the daytime cycle, it alternates the purification phase with the revitalisation phase at regular intervals, programmed according to operating speed, while in the night-time cycle just the revitalisation phase is performed. The control panel constantly displays the function performed and reports any faults and when maintenance is required.
If filtration is not ideal during the daytime cycle, the system automatically activates the ventilation only phase and disables all the others.
The RIVITALIZZATORE® is ideal for city dwellers who wish to experience the emotion of breathing air that is similar to that in natural uncontaminated environments.

AFC SYSTEM®

In air purification, AFC® technology symbolises the tradition of EXPANSION ELETRONIC.
Its microprocessor independently controls the performance of the electrostatic cell that automatically adjusts the filtration level to the specific operating condition.
The information is managed via the control panel. This makes it possible to change the conditions of use at any time, report any faults and signal when the electrostatic cells must be cleaned. To protect the electronic parts of the machine and constantly assure total reliability, the system automatically stops if the required operation is not performed.
In other words, the AFC® system guarantees that optimal performance is constantly maintained whilst minimising external interventions.
All the user has to do is to switch on and select the most appropriate speed for his/her requirements because everything else is done by the machine.

BASIC SYSTEM

BASIC SYSTEM technology identifies traditional air purification systems with electrostatic filters. This technology is used by all the manufacturers in the sector. Unlike other technologies, its efficiency is not constant as the dirtier the filter gets, the more air filtering performance level lowers, though this takes place gradually.
This technology is the simplest and earliest version of electrostatic filtration and works with standard applications and management systems. The information managed by the electronic circuit and displayed on the control panel only shows the basic functions.

BETTER AIR FOR A BETTER QUALITY OF LIFE

PERFORMANCE UC1200

EQUIPMENT, PERFORMANCE AND CONTROLS	NATURE SYSTEM®	AFC SYSTEM®	BASIC SYSTEM
Built-in humidity sensor		-	-
Dual voltage electrostatic filtering (by Expansion Electronic)			
CPU for real-time function management			-
Filtering performance control and management			-
Control and management of automatic daytime ionic balance (ideal microclimate)		-	-
Control and management of night-time deodorisation with negative ions		-	-
Control and management of the reduction in the daytime environmental bacterial level	-77%	-55%	-30%
Control and management of the reduction in the night-time environmental bacterial level	-92%	-	-
Control and management of the reduction in daytime and night-time environmental mould	-98%	-40%	-32%
Control and management of the reduction in environmental electrostatic charges	-99%	-	-25%
Control and management of ozone emissions according to EN60335-2-65:2003-07	<1ppm (limit 5ppm)	<1ppm (limit 5ppm)	<1ppm (limit 5ppm)
Automatic control and management of the quantity of daytime negative ion emissions		-	-
Automatic control and management of the quantity of night-time negative ion emissions		-	-
Performance tolerance	±1%	±1%	±9%
Activation of functions using the IR remote control			
Automatic restart following a power blackout			
Control LED check-up button			-
Alarm light for routine maintenance			
Pre-alarm light for routine maintenance			-
Fault warning light			
Filtration performance warning light			-
Negative ion emitter electrode/s in special wear-resistant alloy		-	
Assembly kit			
Warranty on electronic components (for manufacturing defects)	3 years	3 years	2 years
Warranty on the motor/s (for manufacturing defects)	3 years	3 years	3 years
1st speed filtration performance (on PM2.5)	99% constant	99% constant	95% inconstant
2nd speed filtration performance (on PM2.5)	98% constant	98% constant	89% inconstant
3rd speed filtration performance (on PM2.5)	96% constant	96% constant	86% inconstant

IAQ

IAQ is the set of measurable characteristics of the internal climate of a building, such as air composition, temperature, relative humidity and the level of airborne contaminating agents. All these parameters are comfort indicators for the occupiers of the building.
The increase in external environmental pollution caused by particles, microdust, fumes, volatile organic compounds and microbic contaminating agents, such as mould, bacteria, viruses and various kinds of gases (CO2, Radon...), accumulates inside buildings, impairs the IAQ and seriously harms the health of occupiers.
Pollution and air quality are considered as two of the most serious problems of toxic pollution in the world, as indicated in the "Blacksmith Institute World's Worst Polluted Places 2008" report and in the "World Health Organization IARC SCIENTIFIC PUBLICATION NO. 161".
The reduction in IAQ causes what is known as "SBS, Sick Building Syndrome".
Adequate external air filtration, to dilute the contaminating agents, associated with elevated air filtration or recirculation, to eliminate the indoor polluting agents, are the main methods of improving internal air quality in buildings, making it beneficial to our health.

INSTRUMENTAL IAQ

Measures the quality of the measured air using various systems and instruments.

LEGEND

= INSUFFICIENT
= SUFFICIENT
= FAIR
= GOOD
= VERY GOOD
= EXCELLENT

PERCEIVED IAQ

Measures the internal air quality from the point of view of human perception.

LEGEND

= INSUFFICIENT
= SUFFICIENT
= FAIR
= GOOD
= VERY GOOD
= EXCELLENT

MODEL	TYPE	WITH SMOKERS				WITHOUT SMOKERS			
		Max. volume m³	Max. n° People	Instrumental IAQ	Perceived IAQ	Max. volume m³	Max. n° People	Instrumental IAQ	Perceived IAQ
UC12	NATURE SYSTEM*	126	21	●●	✻✻✻	158	30	●●●	✻✻✻½
	AFC SYSTEM*			●	✻✻			●●	✻✻½
	BASIC SYSTEM			●	✻✻			●●	✻✻½
UC13	NATURE SYSTEM*	126	21	●●●●	✻✻✻✻✻	158	30	●●●●●	✻✻✻✻✻½
	AFC SYSTEM*			●●●	✻✻✻			●●●◖	✻✻✻½
	BASIC SYSTEM			●●	✻✻			●●●	✻✻✻✻
UC12S	NATURE SYSTEM*	100	16	●●●	✻✻✻	122	20	●●●	✻✻✻½
	AFC SYSTEM*			●●	✻✻			●●◖	✻✻✻
	BASIC SYSTEM			●	✻			●●	✻✻✻
UC13S	NATURE SYSTEM*	100	16	●●●●	✻✻✻✻✻	122	20	●●●●●	✻✻✻✻✻✻
	AFC SYSTEM*			●●●	✻✻✻✻			●●●◖	✻✻✻✻½
	BASIC SYSTEM			●●	✻✻✻			●●●	✻✻✻✻
UC122	NATURE SYSTEM*	145	24	●●●	✻✻✻	181	30	●●●◖	✻✻✻½
	AFC SYSTEM*			●●	✻✻			●●●	✻✻✻
	BASIC SYSTEM			●	✻			●●◖	✻✻✻
UC123	NATURE SYSTEM*	145	24	●●●●◖	✻✻✻✻✻½	181	30	●●●●●	✻✻✻✻✻✻
	AFC SYSTEM*			●●●	✻✻✻✻			●●●◖	✻✻✻✻✻
	BASIC SYSTEM			●●	✻✻✻			●●●	✻✻✻½
UC122S	NATURE SYSTEM*	129	21	●●●	✻✻✻	161	26	●●●●	✻✻✻✻
	AFC SYSTEM*			●●	✻✻			●●●	✻✻✻½
	BASIC SYSTEM			●	✻			●●	✻✻½
UC123S	NATURE SYSTEM*	129	21	●●●●●	✻✻✻✻✻✻	161	26	●●●●●	✻✻✻✻✻✻
	AFC SYSTEM*			●●●●	✻✻✻✻✻			●●●●◖	✻✻✻✻✻½
	BASIC SYSTEM			●●●	✻✻✻✻			●●●◖	✻✻✻✻✻

MODEL UC 12

UC12		Pollutant	1st speed	2nd speed	3rd speed
NATURE SYSTEM*	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%
	Ionic environmental				
	Air deodorisation				
AFC SYSTEM*	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%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-
BASIC SYSTEM	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%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-

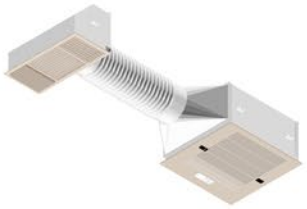
CHARACTERISTICS	u.m.	
Recirculation airflow		
1 st speed	m³/h	660
2nd speed	m³/h	1040
3rd speed	m³/h	1261
External air capacity		
1 st speed	m³/h	-
2nd speed	m³/h	-
3rd speed	m³/h	-
Noise		
1 st speed	dB	44
2nd speed	dB	54
3rd speed	dB	58,50
Consumption	W	165
Power input	V - Hz	230 - 50/60
Dimensions AxBxC	mm	600x900x309
Weight	Kg	36

MODEL UC 13

UC13		Pollutant	1st speed	2nd speed	3rd speed
NATURE SYSTEM*	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%
	Ionic environmental				
	Air deodorisation				
AFC SYSTEM*	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%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-
BASIC SYSTEM	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%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-

CHARACTERISTICS	u.m.	
Recirculation airflow		
1 st speed	m³/h	660
2nd speed	m³/h	1040
3rd speed	m³/h	1261
External air capacity		
1 st speed	m³/h	100
2nd speed	m³/h	180
3rd speed	m³/h	270
Noise		
1 st speed	dB	47
2nd speed	dB	57
3rd speed	dB	61,50
Consumption	W	290
Power input	V - Hz	230 - 50/60
Dimensions AxBxC	mm	600x1200x309
Weight	Kg	50

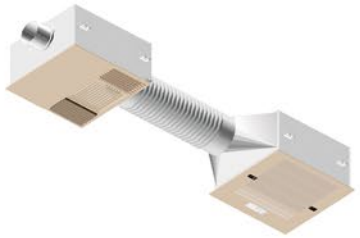
MODEL UC 12S



UC12S		Pollutant	1st speed	2nd speed	3rd speed
NATURE SYSTEM*	Efficiency (EN779)	PM10 (µg/m³)	99,15%	98,70%	97,80%
	Efficiency (EN779)	PM2,5 (µg/m³)	91,00%	86,00%	82,00%
	Efficiency	anti-bacterial	88,00%	82,00%	78,50%
	Ionic environmental				
	Air deodorisation				
AFC SYSTEM*	Efficiency (EN779)	PM10 (µg/m³)	99,15%	98,70%	97,80%
	Efficiency (EN779)	PM2,5 (µg/m³)	91,00%	86,00%	82,00%
	Efficiency	anti-bacterial	55,00%	50,00%	45,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-
BASIC SYSTEM	Efficiency (EN779)	PM10 (µg/m³)	97,60%	97,50%	96,40%
	Efficiency (EN779)	PM2,5 (µg/m³)	90,00%	85,25%	80,50%
	Efficiency	anti-bacterial	30,00%	25,00%	20,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-

CHARACTERISTICS	u.m.	
Recirculation airflow		
1 st speed	m³/h	494
2nd speed	m³/h	782
3rd speed	m³/h	982
External air capacity		
1 st speed	m³/h	-
2nd speed	m³/h	-
3rd speed	m³/h	-
Noise		
1 st speed	dB	44
2nd speed	dB	53,50
3rd speed	dB	58
Consumption	W	165
Power input	V - Hz	230 - 50/60
Dimensions AxBxC	mm	600x5700x309*
Weight	Kg	37

MODEL UC 13S



UC13S		Pollutant	1st speed	2nd speed	3rd speed
NATURE SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	99,15%	98,20%	97,60%
	Efficiency (EN779)	PM2,5 (µg/m³)	92,25%	87,80%	85,90%
	Efficiency	anti-bacterial	88,00%	82,00%	78,50%
	Ionic environmental				
	Air deodorisation				
AFC SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	99,15%	98,20%	97,60%
	Efficiency (EN779)	PM2,5 (µg/m³)	92,25%	87,80%	85,90%
	Efficiency	anti-bacterial	55,00%	50,00%	45,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-
BASIC SYSTEM	Efficiency (EN779)	PM10 (µg/m³)	97,60%	96,90%	96,10%
	Efficiency (EN779)	PM2,5 (µg/m³)	91,20%	86,80%	83,90%
	Efficiency	anti-bacterial	30,00%	25,00%	20,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-

CHARACTERISTICS	u.m.	
Recirculation airflow		
1 st speed	m³/h	500
2nd speed	m³/h	780
3rd speed	m³/h	1000
External air capacity		
1 st speed	m³/h	100
2nd speed	m³/h	180
3rd speed	m³/h	270
Noise		
1 st speed	dB	47
2nd speed	dB	56,50
3rd speed	dB	61
Consumption	W	290
Power input	V - Hz	230 - 50/60
Dimensions AxBxC	mm	600x6000x309*
Weight	Kg	51

MODEL UC 122

UC122		Pollutant	1st speed	2nd speed	3rd speed
NATURE SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	98,15%	97,20%	96,75%
	Efficiency (EN779)	PM2,5 (µg/m³)	85,00%	78,50%	75,00%
	Efficiency	anti-bacterial	88,00%	82,00%	78,50%
	Ionic environmental				
	Air deodorisation				
AFC SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	98,15%	97,20%	96,75%
	Efficiency (EN779)	PM2,5 (µg/m³)	85,00%	78,50%	75,00%
	Efficiency	anti-bacterial	55,00%	50,00%	45,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-
BASIC SYSTEM	Efficiency (EN779)	PM10 (µg/m³)	96,60%	96,00%	95,30%
	Efficiency (EN779)	PM2,5 (µg/m³)	84,00%	77,40%	73,50%
	Efficiency	anti-bacterial	30,00%	25,00%	20,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-

CHARACTERISTICS	u.m.	
Recirculation airflow		
1 st speed	m³/h	820
2nd speed	m³/h	1260
3rd speed	m³/h	1450
External air capacity		
1 st speed	m³/h	-
2nd speed	m³/h	-
3rd speed	m³/h	-
Noise		
1 st speed	dB	44
2nd speed	dB	53
3rd speed	dB	58
Consumption	W	165
Power input	V - Hz	230 - 50/60
Dimensions AxBxC	mm	600x1200x309
Weight	Kg	44

MODEL UC 123

UC123		Pollutant	1st speed	2nd speed	3rd speed
NATURE SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	98,15%	97,20%	96,75%
	Efficiency (EN779)	PM2,5 (µg/m³)	85,00%	78,50%	75,00%
	Efficiency	anti-bacterial	88,00%	82,00%	78,50%
	Ionic environmental				
	Air deodorisation				
AFC SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	98,15%	97,20%	96,75%
	Efficiency (EN779)	PM2,5 (µg/m³)	85,00%	78,50%	75,00%
	Efficiency	anti-bacterial	55,00%	50,00%	45,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-
BASIC SYSTEM	Efficiency (EN779)	PM10 (µg/m³)	96,60%	96,00%	95,30%
	Efficiency (EN779)	PM2,5 (µg/m³)	84,00%	77,40%	73,50%
	Efficiency	anti-bacterial	30,00%	25,00%	20,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-

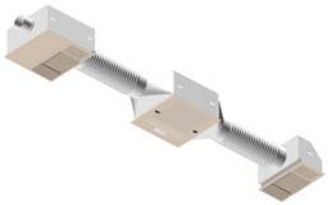
CHARACTERISTICS	u.m.	
Recirculation airflow		
1 st speed	m³/h	820
2nd speed	m³/h	1260
3rd speed	m³/h	1450
External air capacity		
1 st speed	m³/h	100
2nd speed	m³/h	180
3rd speed	m³/h	270
Noise		
1 st speed	dB	47
2nd speed	dB	56
3rd speed	dB	61
Consumption	W	290
Power input	V - Hz	230 - 50/60
Dimensions AxBxC	mm	600x1500x309
Weight	Kg	58

MODEL UC 122S

UC122S		Pollutant	1st speed	2nd speed	3rd speed
NATURE SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	98,85%	97,52%	97,20%
	Efficiency (EN779)	PM2,5 (µg/m³)	87,00%	81,00%	78,50%
	Efficiency	anti-bacterial	88,00%	82,00%	78,50%
	Ionic environmental				
	Air deodorisation				
AFC SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	98,85%	97,52%	97,20%
	Efficiency (EN779)	PM2,5 (µg/m³)	87,00%	81,00%	78,50%
	Efficiency	anti-bacterial	55,00%	50,00%	45,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-
BASIC SYSTEM	Efficiency (EN779)	PM10 (µg/m³)	97,30%	96,30%	95,80%
	Efficiency (EN779)	PM2,5 (µg/m³)	86,00%	95,50%	83,50%
	Efficiency	anti-bacterial	30,00%	25,00%	20,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-

CHARACTERISTICS	u.m.	
Recirculation airflow		
1 st speed	m³/h	698
2nd speed	m³/h	1078
3rd speed	m³/h	1289
External air capacity		
1 st speed	m³/h	-
2nd speed	m³/h	-
3rd speed	m³/h	-
Noise		
1 st speed	dB	44
2nd speed	dB	53
3rd speed	dB	58
Consumption	W	165
Power input	V - Hz	230 - 50/60
Dimensions AxBxC	mm	600x10800x309*
Weight	Kg	46

MODEL UC 123S



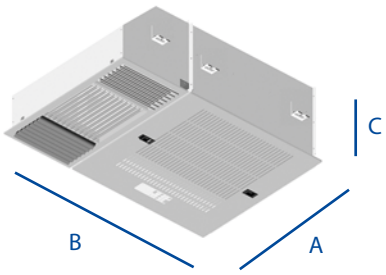
UC123S		Pollutant	1st speed	2nd speed	3rd speed
NATURE SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	98,85%	97,52%	97,20%
	Efficiency (EN779)	PM2,5 (µg/m³)	87,00%	81,00%	78,50%
	Efficiency	anti-bacterial	88,00%	82,00%	78,50%
	Ionic environmental				
	Air deodorisation				
AFC SYSTEM®	Efficiency (EN779)	PM10 (µg/m³)	98,85%	97,52%	97,20%
	Efficiency (EN779)	PM2,5 (µg/m³)	87,00%	81,00%	78,50%
	Efficiency	anti-bacterial	55,00%	50,00%	45,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-
BASIC SYSTEM	Efficiency (EN779)	PM10 (µg/m³)	97,30%	96,30%	95,80%
	Efficiency (EN779)	PM2,5 (µg/m³)	86,00%	95,50%	83,50%
	Efficiency	anti-bacterial	30,00%	25,00%	20,00%
	Ionic environmental		-	-	-
	Air deodorisation		-	-	-

CHARACTERISTICS	u.m.	
Recirculation airflow		
1 st speed	m³/h	698
2nd speed	m³/h	1078
3rd speed	m³/h	1289
External air capacity		
1 st speed	m³/h	100
2nd speed	m³/h	180
3rd speed	m³/h	270
Noise		
1 st speed	dB	47
2nd speed	dB	56
3rd speed	dB	61
Consumption	W	290
Power input	V - Hz	230 - 50/60
Dimensions AxBxC	mm	600x11100x309*
Weight	Kg	60

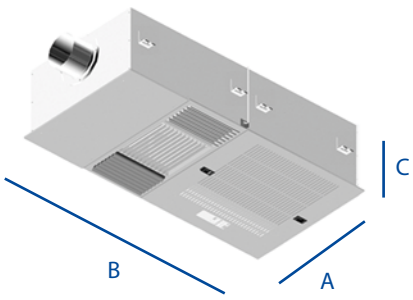
PRODUCT DRAWINGS

UC1200 SERIES

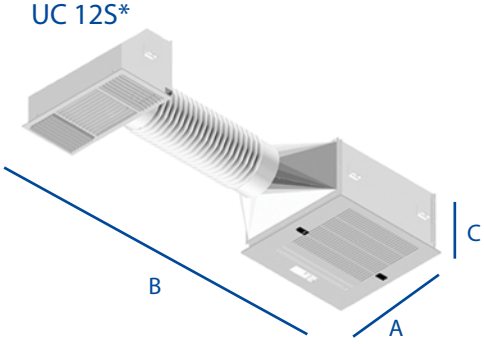
UC 12



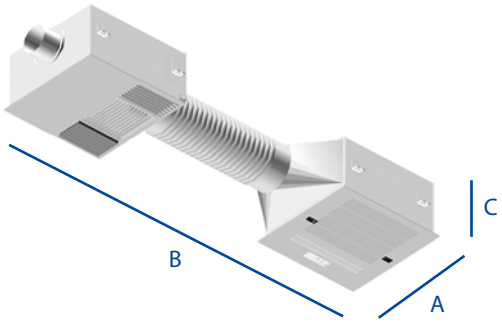
UC 13



UC 12S*



UC 13S*



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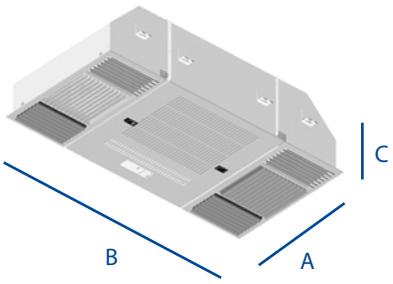

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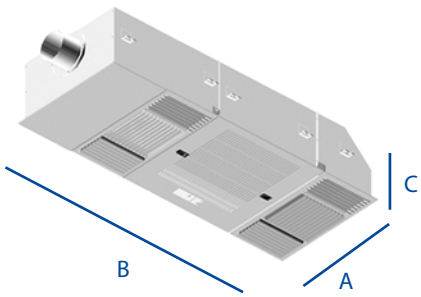

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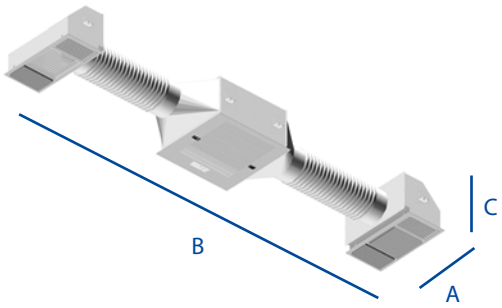

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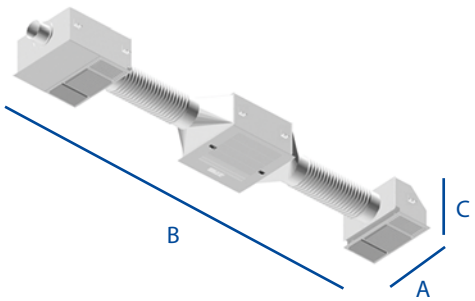

MODEL	DIMENSIONS AxBxC
UC 12	600x900x309
UC 13	600x 1200x309
UC 12S*	600x5700x309
UC 13S*	600x6000x309
UC 122	600x1200x309
UC 123	600x1500x309
UC 122S*	600x10800x309
UC 123S*	600x11100x309

* maximum dimensions

CERTIFICATIONS

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