

BIOX AIR

Active bipolar ionization sanitization system



Technical and construction characteristics

BIOX AIR is the only duct sanitization system that allows you to reduce the microbial load in the air and on surfaces using the tested and certified BIOX AIR technology which exploits the principle of controlled bipolar ionization.

BIOX AIR products are equipped with particular ionizer tubes made of quartz which are powered by a single-phase electric field; the aforementioned ionizer tubes have the ability to produce O⁺ and O⁻ oxygen ions which chemically bond with the H₂O particles contained in the air that passes through the active sanitization modules, thus forming hydrogen peroxide molecules (H₂O₂).

Hydrogen peroxide (more commonly known as hydrogen peroxide) has a high oxidizing power and allows you to damage the cell walls of molds, viruses and bacteria, thus making them harmless. BIOX AIR products can be applied to existing aeraulic pipes or in newly built ducted systems.

BIOX AIR guarantees effective prevention activity in a controlled manner during 24 hours and can be used continuously and in conjunction with the presence of human activity. BIOX AIR is equipped with an electronic system that warns the user in case of malfunctions or reduction in the effectiveness of the product. The reduced electrical consumption from 6 to 18 Watts make the BIOX AIR series very versatile and eco-sustainable. The products are made to be installed in the delivery channels of heating, air conditioning and controlled mechanical ventilation (VMC) systems.



WELL-BEING AND HEALTH



EFFECTIVE ANTIBACTERIAL EFFECT



INACTIVATION OF MOLD



ODOR REDUCTION



EASY INSTALLATION

Model	Air flow m ³ /h	Code	€
BIOX AIR 125	≤ 250	75800452	1.130,00
BIOX AIR 160	≤ 600	75800454	1.200,00
BIOX AIR 200	≤ 1200	75800459	1.280,00

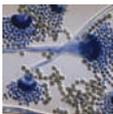
Accessories BIOX AIR



Kit replacement capacitors

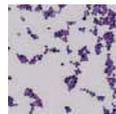
mod. BIOX AIR 125	42320009	268,00
mod. BIOX AIR 160	42320010	300,00
mod. BIOX AIR 200	42320011	600,00

Performance BIOX AIR



Effective antibacterial effect

Tests carried out by the infectious medicine department of the University of Padua have demonstrated over 95% reduction in the microbial load on gram (+) and gram (-) bacterial strains.

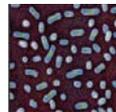


Reduction of microbial content

STAPHYLOCOCCUS	Breakdown %
After 3 h	- 70,90
After 8 h	- 97,02
After 24 h	- 98,80



A healthier environment: inactivation of mold Thanks to the oxidizing power of BIOX AIR, mold, spores, fungi and pollen are inactivated, improving environmental comfort with benefits for all people who find themselves staying in closed environments for a prolonged period of time.



Reduction of microbial content

ESCHERICHIA	Breakdown %
After 3 h	- 84,70
After 8 h	- 89,77
After 24 h	- 99,53



Removal of odors and harmful pollutants present in internal environments
The oxygen molecules activated by BIOX AIR attack unpleasant odors by breaking down odorous substances into simple compounds. Even harmful volatile pollutants (VOCs normally present in closed environments) are attacked by the active oxygen molecules generated by BIOX AIR.



Reduction of microbial content

SACCAROMICES	Breakdown %
After 3 h	- 97,71
After 8 h	- 98,14
After 24 h	- 99,05



More well-being and health for people

BIOX AIR improves the quality of the air we breathe, limiting not only diseases of viral and bacterial origin transmitted by air, but also the causes of many allergies with notable benefits for the respiratory system. BIOX AIR also allows you to sanitize the internal surfaces of the aeraulic pipes and the internal air intake and return vents.



Reduction of microbial content

LEGIONELLA	UFC/01 ml
Negative control	0
Positive control	191
After 5 min	180
After 15 min	3
After 30 min	0
After 60 min	0

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Technological pluses BIOX AIR

In the air ducts and in particular in the most critical sections (curves, changes of direction, section angles, etc.) there are concentrated accumulations of dust, stagnation of humidity, various condensations, mucilage which determine the optimal conditions for the formation of biofilm .

The consequence is the proliferation of bacterial colonies and the formation of legionella, a danger that should not be underestimated for the environments and above all for the health of those who live there.

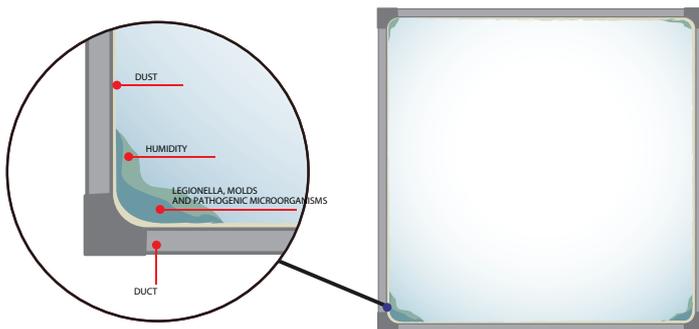
Infections caused by this bacterium are in fact monitored by the World Health Organization (WHO) and in Italy by the Istituto Superiore di Sanità with the aim of raising awareness during the planning and construction phase of distribution networks, especially in community and hospital settings.

And it is at this point that BIOX AIR can prove to be the optimal solution to all these problems, as it carries out a preventive and continuous action.

Traditional cleaning systems, through the use of chemical agents or mechanical reclamation, act when the environmental hygiene problem is now serious.

On the contrary, BIOX AIR is a system capable of preventing the transmission of pathogens, thus avoiding the negative consequences linked to reaching criticality.

The very low energy consumption is the result of particular attention during the product development phase.



Technological pluses BIOX AIR

BIOX AIR technology drastically reduces the microbial load in the air and on surfaces, reduces fine dust and maintains the correct ionic balance thanks to the special quartz condenser.

In particular, the benefits are due to the impact ionization process, the condenser triggers controlled oxidation-reduction reactions on volatile organic compounds (VOCs), thus reducing airborne pollutants. Furthermore, the oxygen ions generated by the oscillating electric field can reach all points, producing a microbicidal effect in all areas where air can pass.

The developments of BIOX AIR technology were conducted in collaboration with important universities and research institutes (University of Padua, University of Udine, Maugeri Institute, A.r.c.h.a. Laboratories and University of Pisa), testing its effects even in critical conditions. Modern bioclimatology has clearly demonstrated that the ideal condition of environmental psychophysical well-being for human beings corresponds to an ionic concentration of 1800 small ions per cm³ of air, divided between positive and negative with a ratio of 80 to 100. In indoor environments , where the natural ionization processes catalyzed by sunlight cannot take place and human activity causes its negative effects to be felt, it is essential to restore the ionic balance artificially. The BIOX AIR system, by releasing calibrated quantities of negative oxygen ions, allows you to re-establish the correct ionic balance of the air, a necessary condition for recreating an optimal habitat.

The particulate matter present in the air represents a vehicle for the transmission of a large number of pathogens, such as viruses and bacteria that are harmful to humans.

BIOX AIR, through the emission of negative and positive ions, is able to form "clusters" of oxygen molecules which break down suspended particulates due to electrostatic and gravitational effects.



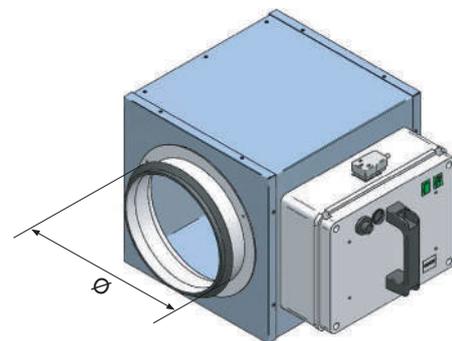
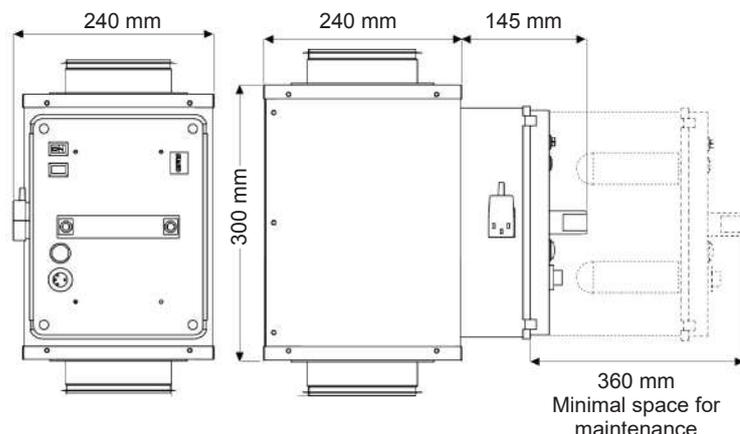
~~x~~ DUST MITES

~~x~~ FUNGI AND BACTERIA

~~x~~ VIRUS AND MOLDS

~~xx~~ SPORES
POLLEN AND
ALLERGENS

Dimensions BIOX AIR



Technical data table BIOX AIR

Model	U.M.	BIOX AIR 125	BIOX AIR 160	BIOX AIR 200
Air flow	m ³ /h	≤ 250	≤ 600	≤ 1200
Room dimensions	m ²	80 - 100	200 - 250	400 - 500
Pipe connection diameter Ø	mm	125	160	200
Electrical absorption	W	6	9	18
Weight	Kg	4,4	4,5	5,8