

# SINTESYS

170S

340S

170C



AIR HANDLING  
SOLUTIONS

## DESCRIPTION

The SINTESYS series is the new EXPANSION ELECTRONIC benchmark for air treatment in civil environments. SINTESYS is, first and foremost, harmony of forms with compact dimensions that assure it looks good in all settings. Its total operating silence makes its presence imperceptible. It is available in two models with aluminium structures, one ceiling-mounted (S), the other wall-mounted (C) and both featuring medium-high performance levels. Its simple and rational design make all maintenance and installation operations quick, easy and cost-effective.

SINTESYS is also sturdily built. The use of very high quality materials makes this product long-lasting and maintains its value.

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





## PERFORMANCE 170S - 340S - 170C



EQUIPMENT, PERFORMANCE AND CONTROLS	NATURE SYSTEM <sup>®</sup>	AFC SYSTEM <sup>®</sup>	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
1 <sup>st</sup> speed filtration performance (on PM2.5)	99% constant	99% constant	95% inconstant
2 <sup>nd</sup> speed filtration performance (on PM2.5)	98% constant	98% constant	89% inconstant
3 <sup>rd</sup> speed filtration performance (on PM2.5)	96% constant	96% constant	86% inconstant

## OPTIONS

- Activated carbon filter;
- Extensive RAL colour range.

# TECHNICAL SPECIFICATIONS

MODEL	u.m.	170S	340S	170C
Capacity				
1 <sup>st</sup> speed	m <sup>3</sup> /h	700	1400	700
2 <sup>nd</sup> speed	m <sup>3</sup> /h	1200	2400	1200
3 <sup>rd</sup> speed	m <sup>3</sup> /h	1700	3400	1700
Noise				
1 <sup>st</sup> speed	dB	40	43	40
2 <sup>nd</sup> speed	dB	42	45	42
3 <sup>rd</sup> speed	dB	51	54	51
Consumption	W	125	190	125
Power input	V-Hz	230 - 50/60	230 - 50/60	230 - 50/60
Dimensions AxBxC	mm	760x468x269	810x810x269	760x468x269
Weight	Kg	28	47	28
Cells	n°	1	2	1
Installation		ceiling	ceiling	wall
Remote control		yes	yes	yes

## SINTESYS SERIES

170S  
340S  
170C



## CERTIFICATIONS

**ILH BERLIN**  
INSTITUT FÜR LUFTHYGIENE

**BSRIA**



**CETIAT**  
ensemble, innover et valider

**CE**



Standard UNI 11254



**expansion<sup>®</sup>  
electronic**  
BETTER AIR FOR A BETTER QUALITY OF LIFE

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