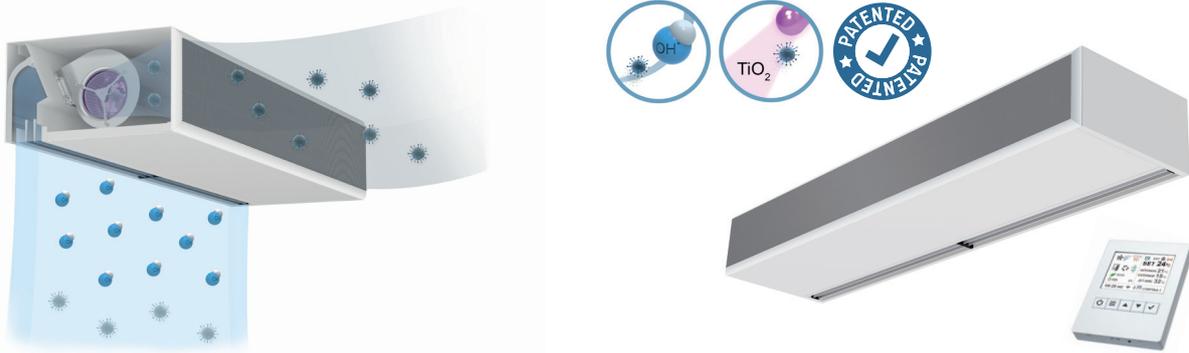




**Characteristics**



- Combines a double patented purification technology through the generation of hydroxyl radicals OH· and the effect of photocatalysis.
- Innovative OH active technology with efficient production of hydroxyl radicals, which sanitize both air and surfaces through a chain reaction. Through Advanced Oxidation Processes (AOP) inactivates up to 99.9% of pathogenic microorganisms (viruses and bacteria), improves air quality (reducing volatile organic compounds and suspended particles) and eliminates odours.
- Includes one sanitizing cartridge with hydrogen peroxide solution to generate hydroxyl radicals.
- Kleenfan technology with photocatalytic disinfectant action fans. UV-A rays, from the long-life LED, act on the titanium dioxide of the turbine generating Reactive Oxygen Species (ROS) that, through oxidation / reduction reactions, deactivate a wide range of pathogenic microorganisms (viruses and bacteria). It mineralizes most of the pollutants present in urban areas produced by vehicles and industry (NOx, SOx, COx, formaldehydes, VOCs, etc.).
- Includes Advanced Clever Control with sanitization program operating 24h / day, 4 levels of air quality indicator and replacement alarm of hydrogen peroxide sanitizing cartridge (around 3 months duration, depending on conditions). Plug&Play, programmable, Intelligent, automatic, energy saving mode, Modbus RTU by PLC...
- Self-supporting casing construction made of galvanized steel plate, finished in structural epoxy-polyester painting white colour RAL9016 as standard. Other colours or stainless steel are available on request.
- Micro-perforated inlet grille with filter functions and easy service. It does not need prefilter.
- Anodized aluminium outlet vanes, airfoil shaped, adjustable from 0 to 15° each side.
- Double-inlet EC centrifugal fans driven by an external rotor motor with very low consumption and noise level. 5-speed selector.
- "P" type with water heated coil. "E" type with electrical shielded elements, three stages with integrated regulation. "A" type without heating, air only. "DX" with direct expansion coil, consult.

**Specifications**

AIR ONLY					
Model	Airflow m <sup>3</sup> /h	Power Fans 230V-50Hz kW	Current Fans 230V-50Hz A	Noise Level (5m) dB(A)	Weight kg
ECM 1000 A OH+FC	1840	0,142	1,24	56	31
ECM 1500 A OH+FC	2760	0,213	1,86	57	46
ECM 2000 A OH+FC	3680	0,284	2,48	58	58
ECM 2500 A OH+FC	4600	0,355	3,10	59	72
ECM 3000 A OH+FC	5520	0,426	3,72	60	86
ECG 1000 A OH+FC	2700	0,213	1,86	61	43
ECG 1500 A OH+FC	3600	0,284	2,48	62	51
ECG 2000 A OH+FC	5400	0,426	3,72	63	80
ECG 2500 A OH+FC	6300	0,497	4,34	64	84
ECG 3000 A OH+FC	7200	0,568	5,96	65	95

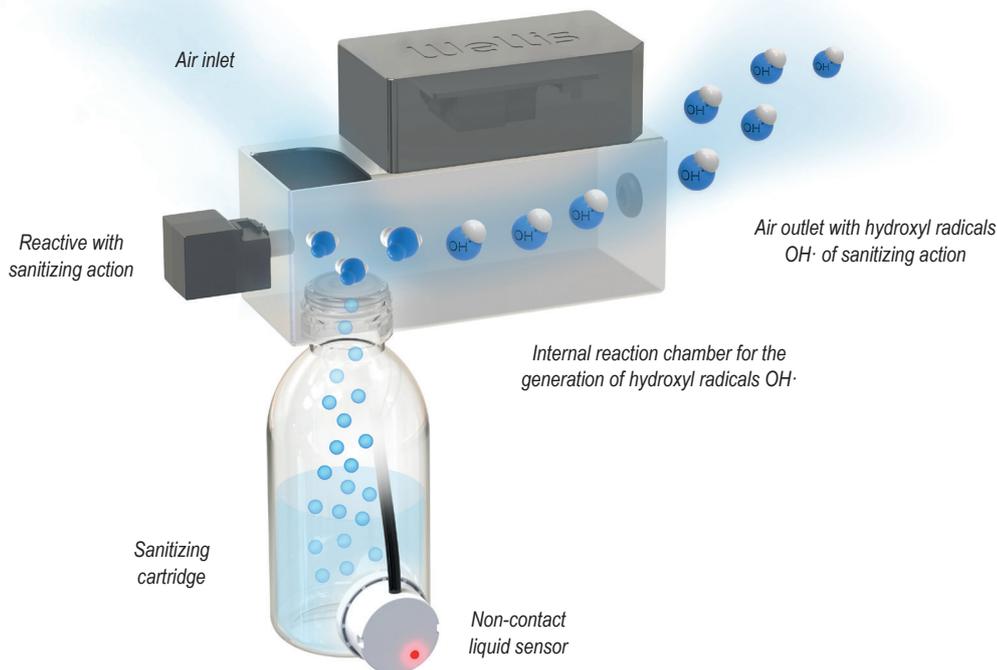
ELECTRICAL HEATED						
Model	Airflow m <sup>3</sup> /h	Electrical Heating Capacity 400Vx3-50Hz kW	Power Fans 230V-50Hz kW	Current Fans 230V-50Hz A	Noise Level (5m) dB(A)	Weight kg
ECM 1000 E OH+FC	1840	3/6/9	0,142	1,24	56	37
ECM 1500 E OH+FC	2760	4/8/12	0,213	1,86	57	57
ECM 2000 E OH+FC	3680	6/12/18	0,284	2,48	58	75
ECM 2500 E OH+FC	4600	6/12/18	0,355	3,10	59	94
ECM 3000 E OH+FC	5520	8/16/24	0,426	3,72	60	112
ECG 1000 E OH+FC	2700	5/10/15	0,213	1,86	61	52
ECG 1500 E OH+FC	3600	7,5/15/22,5	0,284	2,48	62	63
ECG 2000 E OH+FC	5400	10/20/30	0,426	3,72	63	100
ECG 2500 E OH+FC	6300	10/20/30	0,497	4,34	64	106
ECG 3000 E OH+FC	7200	10/20/30	0,568	5,96	65	120

WATER HEATED											
Model	Airflow m <sup>3</sup> /h	P86		P64		P54		Power Fans 230V-50Hz kW	Current Fans 230V-50Hz A	Noise Level (5m) dB(A)	Weight kg
		Heating Capacity 80/60°C kW	Water Drop Pressure 80/60°C Pa	Heating Capacity 60/40°C kW	Water Drop Pressure 60/40°C Pa	Heating Capacity 50/40°C kW	Water Drop Pressure 50/40°C Pa				
ECM 1000 P OH+FC	1720	9,38	920	8,77	4560	8,74	1280	0,142	1,24	56	35
ECM 1500 P OH+FC	2580	14,58	790	14,02	6730	14,71	4690	0,213	1,86	57	53
ECM 2000 P OH+FC	3440	21,12	2010	18,70	4990	19,13	2150	0,284	2,48	58	69
ECM 2500 P OH+FC	4300	27,53	3960	23,33	4010	24,95	4230	0,355	3,10	59	86
ECM 3000 P OH+FC	5160	33,99	6860	29,05	7050	30,54	5920	0,426	3,72	60	103
ECG 1000 P OH+FC	2550	11,89	1400	11,27	7110	11,50	2090	0,213	1,86	61	50
ECG 1500 P OH+FC	3400	17,29	1070	16,77	9240	17,86	6620	0,284	2,48	62	59
ECG 2000 P OH+FC	5100	26,86	3080	24,14	7850	25,24	3530	0,426	3,72	63	92
ECG 2500 P OH+FC	5950	33,63	5650	28,84	5840	31,38	6360	0,497	4,34	64	96
ECG 3000 P OH+FC	6800	40,34	9290	34,81	9710	37,16	8400	0,568	5,96	65	109

Water heated: connection pipes P86 and P64 are 2x3/4" female (male if lateral pipes), P54 2x1" male. P86 2 rows coil, P64 3 rows coil, P54 4 rows coil.



Technology with Hydroxyl Radicals OH·



Innovative and disruptive patented technology which effectively generates and expands hydroxyl radicals (OH·) that by oxidation:

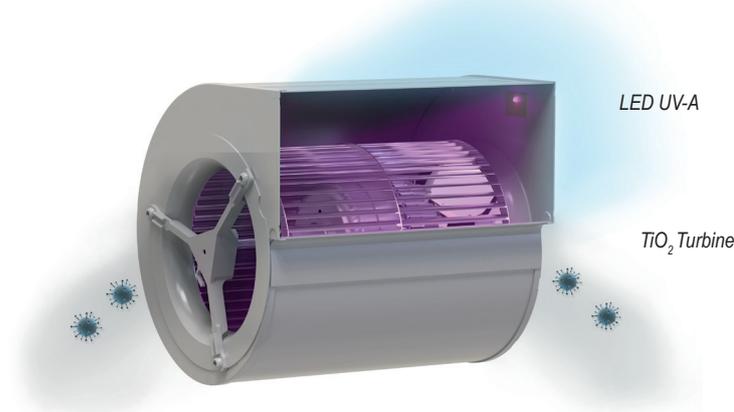
- Inactivates up to 99.9% of pathogenic microorganisms both in the air and on surfaces (viruses and bacteria)
- Improves air quality by reducing volatile organic compounds (VOCs) and suspended PM particles
- Eliminates odours

The hydroxyl radical (OH·) is the most important natural oxidant in the troposphere. It is vital in the removal of greenhouse gases such as carbon dioxide or methane.

Clean and safe technology which constantly produces hydroxyl radicals (OH·).

Hydroxyl radicals (OH·) are an active sanitization technology that, through the effect called “respiratory explosion”, create a series of chain reactions which quickly inactivate pathogenic microorganisms not only from the air but also from the surfaces.

Kleenfan Technology with Photocatalysis



- Kleenfan technology with photocatalytic disinfectant action fans.
- Photocatalysis starts from the natural principle of decontamination of nature itself. It is a natural phenomenon that, mimicking photosynthesis, accelerates a photoreaction through the action of light on a catalyst.
- UV-A rays, from the long-life LED, act on the titanium dioxide in the turbine generating Reactive Oxygen Species (ROS) that cause advanced oxidation processes (AOP), deactivating a wide range of pathogenic microorganisms (viruses and bacteria).
- This catalytic reaction produces oxidation reactions in organic compounds and reduction in inorganic ones, in addition to significantly reducing suspended particles.
- Mineralizes most of the pollutants present in urban areas produced by vehicles and industry (NOx, SOx, COx, formaldehydes, VOCs, etc.).



**Air quality**

**Sanitization function:**

The TFT screen of the Clever control indicates by means of an icon that sanitization is activated and working.

ON mode: sanitization activated while the air curtain is running.

24h mode: sanitization activated 24 hours a day. When the air curtain is OFF, the ventilation continues to operate at a programmed minimum speed.

This extra sanitization function is compatible with all Clever control standard air curtains programs.



**Sanitization activated**

*Flashing when empty cartridge alarm (without liquid)*

**Air quality:**

Continuous monitoring of air quality by means of a volatile organic component sensor. Indicates air quality status with 4 colors.



*Optimal*



*Good*



*Moderate*



*Poor*

**Cartridge alarm:**

The level of the sanitizing cartridge is controlled by a sensor that will warn when the liquid runs out to replace it.

The sanitization icon will flash on the TFT screen of the Clever control indicating that the cartridge must be replaced.

Inside the equipment there is also a red indicator LED that will light up when the new cartridge is replaced.



**Cartridge working**



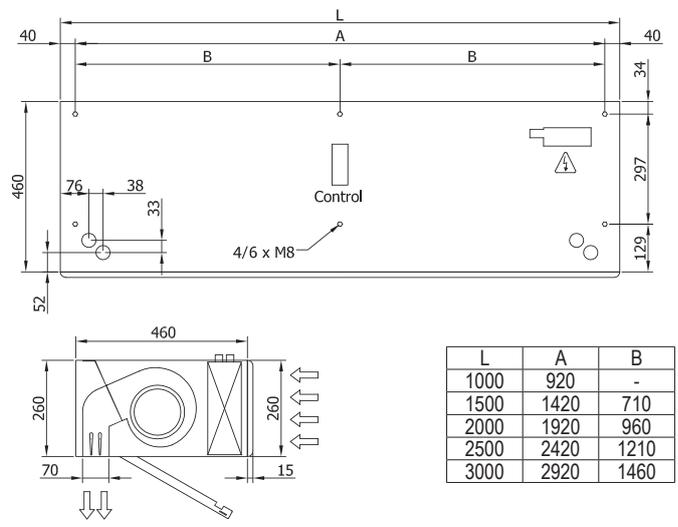
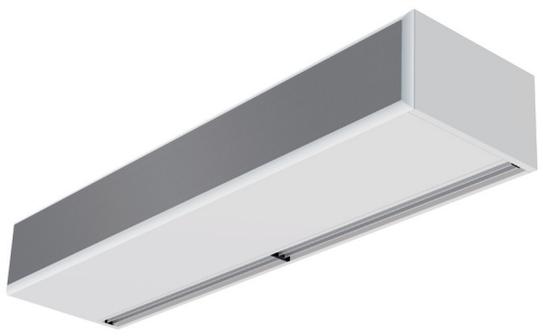
**Cartridge empty**



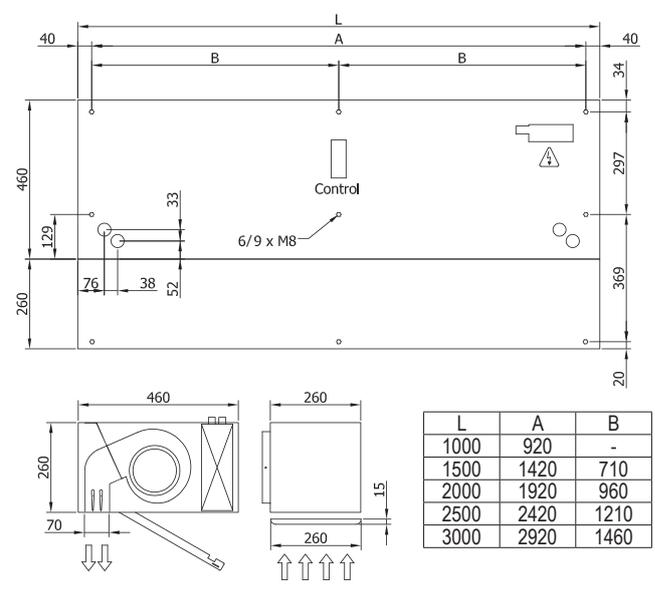
**Replacing cartridge**



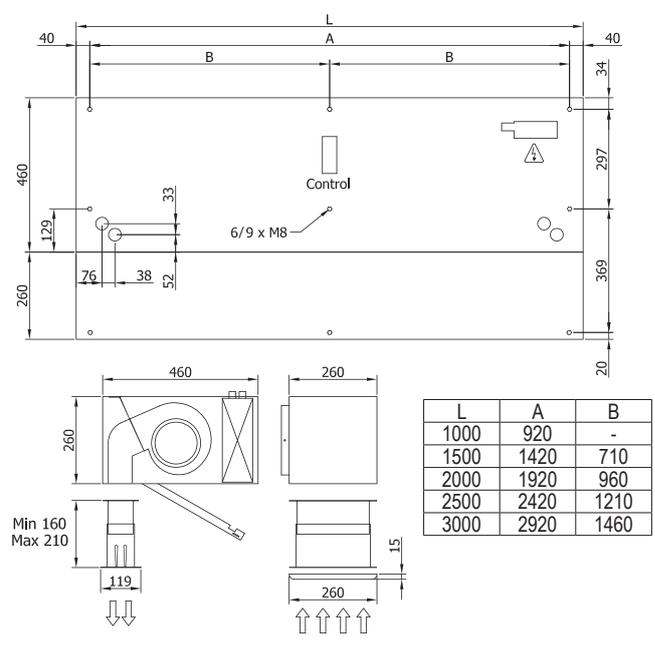
Layouts and dimensions



Free hanging mounting



Inside ceiling surface mounting



False ceiling invisible mounting