SPECIFICATIONS AND DIMENSIONS

PEU size(1)	01	02	03	03-E	04	05	05-E	06	07	07-E	08	09	09-E	10
Airflow [m ³ /h]	3240	6480	97	20	12960	16	200	19440	24	300	29160	34	020	38880
Airlfow [m³/s]	0.9	1.8	2	.7	3.6	4	.5	5.4	6.	75	8.1	9.	.45	10.8
Height [mm]	750	750	1050	1350(2)	1350	1650	1350(2)	1350	1650	1950(2)	1950	2250	1950(2)	1950
Width [mm]	730	1330	1330	1030(2)	1330	1330	1630(2)	1930	1930	1630(2)	1930	1930	2230(2)	2530

Sizes 11 to 14 on request, for exhaust airflow rates up to 68,880 m³/h (18 m³/s)
When PolluStop PEU unit is equipped with Halton's Electrostatic Precipitator (ESP)





400

- Purpose: Remove medium-sized particles.
- Grade: Pleated filter G4 (EU4).
- Efficiency > 95% for 5 microns particles and above.
- Media: Cotton and synthetic fibre.
- Built according to EN 1886:2007.
- 100% incinerable.



- Ultra high efficiency Electrostatic Precipitator (ESP).
- Purpose: Ideal for removing excess moisture and particulate from exhaust airstream.
- With integral hot water/detergent wash system for in situ cleaning.
- Requires permanent drain connection.
- Includes downstream mesh filter.
- Built according to EN 1886:2007.



ESP Without wash system





- 1000
 UV-C (ultraviolet light) based H
- UV-C (ultraviolet light) based Halton Capture Ray™ technology.
- Includes ozone producing lamps within quartz sleeves.
- Purpose: Removal of airborne grease and reduction of cooking odours.
- Ideally located in the hood but can be incorporated in the PolluStop PEU unit.
- Number of lamps depending on the cooking operation (equipment and menu).
- Built according to EN 1886:2007.



- < 800 ►
- Purpose: Remove medium-sized particles.
- Grade: F9 (EU9), 8 short pockets.
- Efficiency >95% for 0.4 microns particles and above.
- Media: Fibreglass.

_**×**

- Lifetime increased by at least 80% when used with Halton's Electrostatic Precipitator (EW).
- Built according to EN 1886:2007.



- ◀ 600 ►
- Purpose: Remove ultra fine particles.Grade: HEPA (High Efficiency
- Particulate Arrester) filter H10 (EU10).
- Efficiency > 95% DOP for 0.3 microns particles and above.
- Media: Water-repellent glass paper pleats separated by corrugated aluminium.
- Not suitable for high moisture content air.
- Lifetime increased by at least 80% when used with Halton's Electrostatic Precipitator (EW).
- Built according to EN 1886:2007.



- ◀ 600 ►
- Approximately efficient to 45-50% heat transfer.
- Ideally suited to either air-to-air or air-towater transfer, or both.
- No risk of cross contamination.
- Can transfer coolth under certain summer conditions.
- Copper pipework with aluminium fins.
- Number of rows determined by the specific duty.
- Includes moisture eliminators (essential for PolluStop PEU units).
- Pressurisation set available if required (included with Extenso XEU unit).
- Built according to EN 1886:2007.



	Pres	sure Loss ΔI	P [Pa]	Lifetime depending on cooking activity [Weeks]				
Module	Clean	Dirty	Overload	Light (1)	Medium (2)	Heavy (3)		
PG Panel Filter (G4)	55	125	150	810	48	3		
EW / ED Electrostatic Precipitator		125250		-	-	-		
UO UV-C Treatment (Ozone)		50		13,000 hours				
BS Bag Filter (long pockets)	190	250	450	1620 / 2936 (ESP)	810 / 1418 (ESP)	6 / 11 (ESP)		
HF HEPA Filter	155	400	550	2535 / 4563 (ESP)	1220 / 2236 (ESP)	810 / 1418 (ESP)		
CF Carbon Filter	65	140	160	104	78	52		
RC Recovery Coil		150250		-	-	-		
PG Panel Filter (G4) EW / ED Electrostatic Precipitator UO UV-C Treatment (Ozone) BS Bag Filter (long pockets) HF HEPA Filter CF Carbon Filter RC Recovery Coil	55 190 155 65	125 125250 50 250 400 140 150250	150 450 550 160	810 - 1620 / 2936 (ESP) 2535 / 4563 (ESP) 104 -	48 - 13,000 hours 810 / 1418 (ESP) 1220 / 2236 (ESP) 78 -	3 - 6 / 11 (E 810 / 141 52 -		

(ESP) Lifetime extension gained when preceded by Halton's Electrostatic Precipitator

(1) Light duty: All electric cooking & steam cooking.

(2) Medium duty: Mix of gas/electric cooking appliances, frying.

(3) Heavy duty: All gas cooking appliances, anything to do with solid fuel, charbroiling and grilling. Any type of oriental cooking. High output cooking appliances for production kitchens.





- Purpose: Remove surplus ozone generated by UV-C lamps.
- Grade: NFX Activated Carbon granules.
- Media: Coconut shell activated carbon (eco-friendly).
- Includes 25 mm G4 Post-Carbon Panel Filter as standard.
- Built according to EN 1886:2007.
- Incorporates a "colourcell" to indicate filter life.





- High manufacturing standards for the longest lifecycle.
- High efficiency direct drive fans.
- First class dynamic balancing (lowest vibrations)
- Temperature rating up to 40°C.
- Variable frequency drive.
- Up to 2000 Pa total pressure.





- PST 8/10: 2060
- High manufacturing standards for the longest lifecycle.
- High efficiency direct drive fans.
- First class dynamic balancing (lowest vibrations)
- Temperature rating up to 120°C.
- Variable frequency drive.
- Up to 2000 Pa total pressure.







1200

4





- PST 8/10: 2060
- High manufacturing standards for the longest lifecycle.
- High efficiency direct drive fans.
- First class dynamic balancing (lowest vibrations)
- Temperature rating up to 400°C.
- Serves for both duty and fire mode.
- Variable frequency drive.
- Up to 2000 Pa total pressure.



OUTDOOR INSTALLATION



PolluStop PEU, Aerolys AEU and Extenso XEU units can be installed externally. In such cases a special weatherproof roof will be supplied. The touch screen can still be installed on the unit if required as it is protected to IP65.

SOUND ATTENUATION



Built-in attenuators are available for PolluStop PEU, Aerolys AEU and Extenso XEU units with the option of Melinex lining for polluted airstreams. Intended for the reduction of in-duct noise transmission. Standard construction is 100 mm Airways & 200mm Splitters, with 900 mm, 1200 mm and 1500 mm length options. For specific noise requirements, consider seeking professional acoustic advice.



Aerolys SUPPLY UNIT WITH AIR QUALITY CONTROL AND HEAT RECOVERY

EUROVENT accredited, "Urban Pack" Filters, Dual skin



APPLICATIONS

AEU

The Aerolys AEU range of supply air-handling units has been developed to work alongside, and complement, the successful range of PolluStop PEU pollution control units.

The primary function of the Aerolys AEU supply unit is not just simply to introduce replacement air back into a commercial kitchen, but to ensure that the quality of that air is as good as it possibly can be.

As with the PolluStop PEU range, Aerolys AEU has been conceived on the basis of individual modules which are then selected based on whatever specific requirements are called-for by a given project.

- Eurovent accredited.
- Specially developed for kitchens in dense urban areas.
- Wide range of units, from 3,240 to 38,880 m³/h (0.9 to 10.8 m³/s)
- If selected, can work in conjunction with the energy recovery coil incorporated in a PolluStop PEU exhaust unit, offering either air-to-air or air-to-water heat transfer, or a combination of both.
- Has options for low temperature hot water, indirect gas or electric heating facilities.
- Has options for chilled water or direct expansion (dx) cooling facilities.

- Attenuators for reducing in-duct noise levels can be provided.
- Features Halton's unique "Urban Pack" which is a combination of ultra high-efficiency Panel filters, impregnated long-pocket Bag filters and germicidal nonozone-producing UV lamps. This combination works to ensure the cleanest and most bacteria-free replacement air for the kitchen, its food and its staff.
- Fully integrated into the Halton Control Platform
- External insulated panelling available in 4 colour options (dark blue, light grey, dark grey or white).
- Acoustic insulation built into the unit's double-skin panels.
- All in one control system for monitoring the filter pressure losses, controlling the speed of the fan and monitoring the UV-C lamps.
- External installation possible. There are a number of additional service possibilities, such as variable frequency drive and other monitoring systems.



Halton Foodservice participates in the Eurovent Certified Programme for Halton AHU range of exhaust and supply units (PolluStop PEU, Aerolys AEU and Extenso XEU). Diploma: 17.02.277.

Check on-going validity of certificate: www.eurovent-certification.com



SPECIFICATIONS AND DIMENSIONS

01	02	03	04	05	06	07	08	09	10
3240	6480	9720	12960	16200	19440	24300	29160	34020	38880
0.9	1.8	2.7	3.6	4.5	5.4	6.75	8.1	9.45	10.8
750	750	1350	1350	1350	1350	1950	1950	1950	1950
730	1330	1030	1330	1630	1930	1630	1930	2230	2530
	01 3240 0.9 750 730	01 02 3240 6480 0.9 1.8 750 750 730 1330	01 02 03 3240 6480 9720 0.9 1.8 2.7 750 750 1350 730 1330 1030	01 02 03 04 3240 6480 9720 12960 0.9 1.8 2.7 3.6 750 750 1350 1350 730 1330 1030 1330	01 02 03 04 05 3240 6480 9720 12960 16200 0.9 1.8 2.7 3.6 4.5 750 750 1350 1350 1350 730 1330 1030 1330 1630	01 02 03 04 05 06 3240 6480 9720 12960 16200 19440 0.9 1.8 2.7 3.6 4.5 5.4 750 750 1350 1350 1350 1350 730 1330 1030 1330 1630 1930	01 02 03 04 05 06 07 3240 6480 9720 12960 16200 19440 24300 0.9 1.8 2.7 3.6 4.5 5.4 6.75 750 750 1350 1350 1350 1350 1950 730 1330 1030 1330 1630 1930 1630	01 02 03 04 05 06 07 08 3240 6480 9720 12960 16200 19440 24300 29160 0.9 1.8 2.7 3.6 4.5 5.4 6.75 8.1 750 750 1350 1350 1350 1350 1950 1950 730 1330 1030 1330 1630 1930 1630 1930	01 02 03 04 05 06 07 08 09 3240 6480 9720 12960 16200 19440 24300 29160 34020 0.9 1.8 2.7 3.6 4.5 5.4 6.75 8.1 9.45 750 750 1350 1350 1350 1350 1950 1950 1950 730 1330 1030 1330 1630 1930 1630 1930 2230

* Sizes 11 to 14 on request, for exhaust airflow rates up to 68,880 m³/h (18 m³/s)





205

130

- Motorised shut off damper.
- · Protects AHU from ingress of moisture and cold air.
- Fabricated from galvanized sheet steel.



- Purpose: Protect the unit from the ingress of outside air cold enough to damage the items of plant.
- Typically, would raise the temperature of the incoming air to 5°C.
- Copper pipework with aluminium fins.
- Number of rows determined by the specific duty.
- 3-way diverting valve set available if required.
- Generally assumed that a LPHW (Low Pressure Hot Water) supply is available on site.
- Built according to EN 1886:2007.



- Purpose: Remove medium/fine particles.
- Grade: Ultra high efficiency pleated filter M5 (EU5)
- Efficiency > 97% for 5 microns particles and above.
- Media: Synthetic glass fibre paper.
- Built according to EN 1886:2007.
- A component of the Halton Urban Pack where the quality of the incoming air must be to an extremely high standard.
- 100% incinerable.



800 <

- Copper pipework with aluminium fins.
- Number of rows determined by the specific duty.
- As standard includes moisture eliminators.
- Complete with drain pan and connection.
- Generally assumed that a chilled water supply is available on site.
- 3-way modulating valve available if required.
- Built according to EN 1886:2007.



◀ 600 ►

- Can be used as Frost and/or Duty coil.
- Copper pipework with aluminium fins. • Number of rows determined by the specific duty.
- 3-way modulating/diverting valve set available if required.
- Generally assumed that a LPHW (Low Pressure Hot Water) supply is available on site.
- Built according to EN 1886:2007.



Also Gas and Electric options

UV-C Treatment UG Germicidal



1000

- Purpose: For use in Aerolys AEU units where removal/reduction of bacteria is required (part of Halton's "Urban pack" offering)
- Includes non-ozone producing UV lamps inside quartz sleeves.
- A component of the Halton Urban Pack where the quality of the incoming air must be to an extremely high standard (hospitals, care homes, public buildings, etc).
- Built according to EN 1886:2007.



	Pres	ssure Loss Δ	P [Pa]	Lifetime depending on the application [weeks]			
Module	Clean	Dirty	Overload	Rural	Semi-rural	Urban	
FC Frost Coil		20 to 50		-	-	-	
PM Panel Filter (M5)	60	150	250	810	48	3	
CW Chilled Water Coil		150 to 200		-	-	-	
HW Heating Coil (LPHW)	20 to 50			-	-	-	
UG UV-C Treatment (Germicidal)		50		13,000 hours			
BU Bag Filter (Urban, Long Pockets)	85	250	450	3545	2535	1525	
BL Bag Filter (Long Pockets)	130	250	450	3545	2535	1525	
RC Recovery Coil	150250			-	-	-	



◀ 790 ►

- Purpose: Remove fine particles and reduce toxic gases.
- Grade: F7 (EU7), 10 long pockets.
- Media: Glass fibre and broad spectrum carbon. Carbon impregnation to reduce toxic gases.
- Efficiency >88% for 0.4 microns particles and above.
- A component of the Halton Urban Pack where the quality of the incoming air must be to an extremely high standard (hospitals, care homes, public buildings, etc).
- Built according to EN 1886:2007.







- Purpose: Remove medium/fine particulate.
- Grade: F9 (EU9), 12 long pockets.Efficiency >96% for 0.4 microns
- particles and above.Media: Fibreglass
- Built according to EN 1886:2007.



- Approximately efficient to 45-50% heat transfer.
- Ideally suited to either air-to-air or air-towater transfer, or both.
- No risk of cross contamination.
- Can transfer coolth under certain summer conditions.
- Copper pipework with aluminium fins.
- Number of rows determined by the specific duty.
- Includes moisture eliminators.
- Pressurisation set available if required.
- Built according to EN 1886:2007.



- High manufacturing standards for the longest lifecycle.
- High efficiency direct drive fans.
- First class dynamic balancing (lowest vibrations)
- Temperature rating up to 40°C.
- Variable frequency drive.
- Up to 2000 Pa total pressure.

OUTDOOR INSTALLATION



PolluStop PEU, Aerolys AEU and Extenso XEU units can be installed externally. In such cases a special weatherproof roof will be supplied. The touch screen can still be installed on the unit if required as it is protected to IP65.

SOUND ATTENUATION



Built-in attenuators are available for PolluStop PEU, Aerolys AEU and Extenso XEU units with the option of Melinex lining for polluted airstreams. Intended for the reduction of in-duct noise transmission. Standard construction is 100 mm Airways & 200 mm Splitters, with 900 mm, 1200 mm and 1500 mm length options. For specific noise requirements, consider seeking professional acoustic advice.



ExtensoCOMBINED SUPPLY AND EXHAUST UNITXEUEUROVENT accredited, pollution and air quality contr

EUROVENT accredited, pollution and air quality control, heat recovery, smaller footprint



APPLICATIONS

2 world-class products in a single package!

The Extenso XEU range of "combined" air-handling units is offered as a solution for those projects requiring PolluStop PEU pollution control and Aerolys AEU supply air-handling to be provided as a single, compact and integrated unit.

Extenso XEU combined unit provides all the features and options that are available from the individual PolluStop PEU and Aerolys AEU ranges of units, but with the added benefit that the single "footprint" of Extenso XEU is half that of the separate units. This can be of particular benefit on those projects where Plant Room, or rooftop, space is at a premium.

- Specially developed for kitchens in dense urban areas.
- Wide range of units, from 3,240 to 38,880 m³/h.
- Can be configured as either "stacked" (one on top of the other), or "alongside" (side-by-side)
- If selected, can incorporate matched energy recovery coils offering either air-to-air or air-to-water heat transfer, or a combination of both
- Fully integrated into the Halton Control Platform
- External insulated panelling available in 4 colour options (dark blue, light grey, dark grey or white).

- Respects the neighbourhood due to minimal cooking odours.
- Saves energy due to the integrated heat recovery coil, sustainable over time.
- Acoustic insulation built into the unit's double-skin panels.
- All in one control system for monitoring the filter pressure losses, controlling the speed of the fan and monitoring the UV-C lamps.
- The three systems are controlled with one interface: the Halton Touch Screen.
- External installation possible. There are a number of additional service possibilities, such as variable frequency drive and other monitoring systems.



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Check on-going validity of certificate: www.eurovent-certification.com



Halton expertise and innovations

AIR QUALITY CONTROL & HEAT RECOVERY ON SUPPLY

Conditioning air for professional kitchens is not only a question of temperature and the quality of the air. It is also a question of correct balance between supply and exhaust as well as energy efficiency. Halton Foodservice-specific supply-air units address the highest levels of safety, comfort and energy efficiency.







Badly designed supply-air diffusion can easily distort the cooking plume and disrupt the working conditions. Halton has a unique range of Foodservice-specific diffusers and the expertise to ensure the highest level of air distribution.

EMISSIONS CAPTURE







Complete capture of the cooking effluent with the lowest possible energy consumption is the contribution from Halton's Capture Jet[™] hoods and ventilated ceilings as well as for specific solutions such as theatre cooking.

MECHANICAL GREASE FILTRATION





Halton's highly efficient mechanical filters reduce the build-up of grease deposits inside the ductwork. They improve fire safety and hygiene levels and reduce ductwork cleaning costs.

SPECIFIC LOCAL GREASE & ODOUR FILTRATION PROCESSES



Received a second secon

Bring your safety to the highest level and prevent neighbourhood complaints with specific grease and odour treatment processes installed within Halton's exhaust devices... including solid fuel specific solutions.

AUTOMATIC CLEANING



3



Focus on your core business of preparing and delivering food whilst Halton washes down the filters and exhaust plenums automatically for you and reduces your maintenance costs.

Halton

at every step!

POLLUTION CONTROL & HEAT RECOVERY ON EXHAUST

Returning the air to atmosphere in at least as good a condition as when it was taken in represents a real challenge. To reach that goal, Halton's range of exhaust units is based on the most efficient emission control technologies and enables the establishment of professional kitchens anywhere. They also ensure the highest efficiency for heat recovery.













Enjoy the highest energy savings among all airflow optimisation systems available in the market thanks to M.A.R.V.E.L. Always keep an eye on your restaurant with Halton's remote control and monitoring tools.





Due to the successful Halton Control Platform, whatever the number of technologies you have in your kitchen, you will always have your kitchen at your fingertips. Haltons Touch Screen provides a simple and intuitive interface.





FIRE SUPPRESSION









Fire hazard is a major concern in todays professional kitchens. Halton pre-engineers and factory pre-installs Ansul fire suppression systems for an aesthetically-pleasing system with HACCP certification.



With the prevention of grease build-up and fire extinguishing systems, it only remains for duct monitoring to complete this safety circle. Halton's duct monitoring systems provide an alarm to indicate that cleaning is required.







Whether it comes to moving the show among the guests or installing a small kitchen devoid of a ventilation system, Halton's highly efficient recycling units unleash countless business opportunities.

With Halton solutions, get a

The four cornerstones of a High Performance Kitchen

A professional kitchen is a very demanding environment in which ventilation is always a challenge. Each technology, system or product developed by Halton is exclusively designed to combine one or more of the following objectives and this at every step of a kitchen ventilation system:

- Energy efficiency;
- Indoor Environment Quality (IEQ);
- Food or Fire Safety;
- Controlled Emissions.





Energy Efficiency

At 800 kWh/m², the catering business is the most energyconsuming activity out of all commercial and residential buildings in the United States, far ahead of the hospital sector (at 600 kWh/m²) (1). All things being equal, this observation may also be considered valid in Europe and in many other countries. It makes energy performance the most important aspect of the "High Performance Kitchen" concept.

Indoor Environment Quality (IEQ)

Lack of staff is one of the major challenges faced by commercial catering. The low appeal of the chef's profession is largely due to unpleasant thermal comfort. This is related to air temperature and speed, the heat radiated by cooking appliances and humidity. The Indoor Environment Quality (IEQ) is a wider notion that also encompasses lighting quality, sound pressure levels and visual comfort. All of these factors can be improved with a correctly designed and properly dimensioned air ventilation and conditioning system.

Halton

High Performance Kitchen



Safety

Many restaurants today do not re-open after a major safety incident. Operators or owners not only have to deal with the interruption of business, but also face up to their responsibilities to the building's other tenants, customers, third parties, or cope with bad press. Safety is de facto a major concern in professional kitchens.

Controlled Emissions

It is highly likely that future legislation may well stipulate that "fresh" air used for any process must be discharged back into the atmosphere at the same quality as that at which it was taken in. This will represent a real challenge for catering establishments in dense urban areas. Halton solutions combine the four cornerstones, at all steps, to get High Performance Kitchens

Our innovations constantly supply the widest and most efficient technical range in the field of kitchen ventilation. This enables our design to combine the four cornerstones at all steps of your kitchen ventilation. It generates a powerful synergy that leads to a High Performance Kitchen. A kitchen where efficiency works "hand-in-glove" with wellbeing.

(1) Energy Efficiency in Buildings, Transforming the Market (WBCSD World Business Council for Sustainable Development)





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Halton has a policy of continuous product development, therefore we reserve the right to modify design and specifications without notice. For more information, please contact your nearest Halton agency.

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Enabling Wellbeing