

## EEZ Grease canopy with ozone cleaning



The EEZ Grease canopy with ozone cleaning combines effective grease removal with stylish design to thoroughly clean your kitchen exhaust airstream and remove excess heat from the kitchen.

In addition to mechanically separating grease with our highly efficient HFK grease filters, this canopy also includes an integrated ozonator and smart control system to further reduce grease and odor. Ozone treatment is simply chemical oxidation, whereby grease and odor are broken down to water vapor and dry minerals, thereby providing many advantages including:

### Ozonator Canopy Advantages:



#### Effective two-phase cleaning

Phase 1: Mechanical grease separation

Phase 2: Ozone treatment by oxidation



#### Notably improved fire safety



#### Up to 95% reduced odor



#### Enables heat recovery



#### Low operating cost



#### No consumable parts



#### Maintenance service available

Canopy construction complies with the standard EN 16282-2 Equipment for commercial kitchens – Kitchen ventilation hoods; design and safety requirements.

Ozonator technology used in the canopy complies with standard EN 16282-8 Equipment for commercial kitchens – Installations for treatment of aerosol. Requirements and testing.

## Recommended Data

Length L	Extraction air flow (E1, E2), l/s ( $\Delta p_{tot}$ 14-48 Pa)	Supply air flow per linear meter of panel, l/s			
		SPx1+ "Turbo Grip"	SPx2+ "Turbo Grip"	SPx3+ "Turbo Grip"	Side panel
1500	210-390				
2000	280-520	10-61 Pa	10-40 Pa	10-28 Pa	10-40 Pa
2500	350-650	71-175 l/s	110-220 l/s	165-275 l/s	22-40 l/s
2900	420-780				

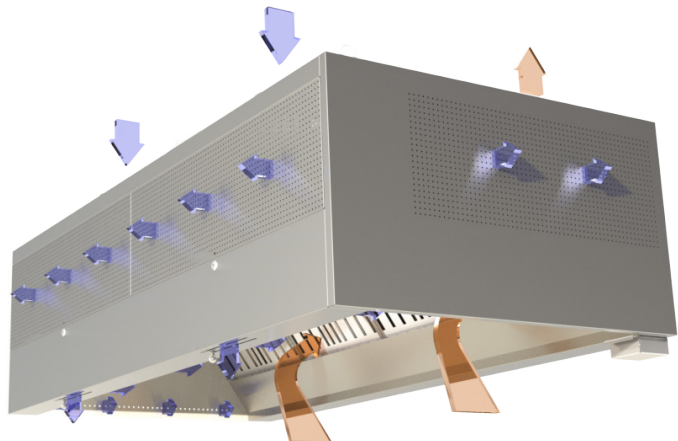
## Function

Hot and greasy air is sucked through mechanical grease filters into the exhaust air chamber. The mechanical filters collect most of the larger grease particles, which drip down into the grease collection container.

Our ozonator module is installed inside the supply air chamber, thereby provided with clean air for its reliable production of ozone. Its ozonated air is then drawn into and mixed with the exhaust air, at which point the simple and natural process of chemical oxidation takes over to break down odor and grease particles remaining in the air stream even further.

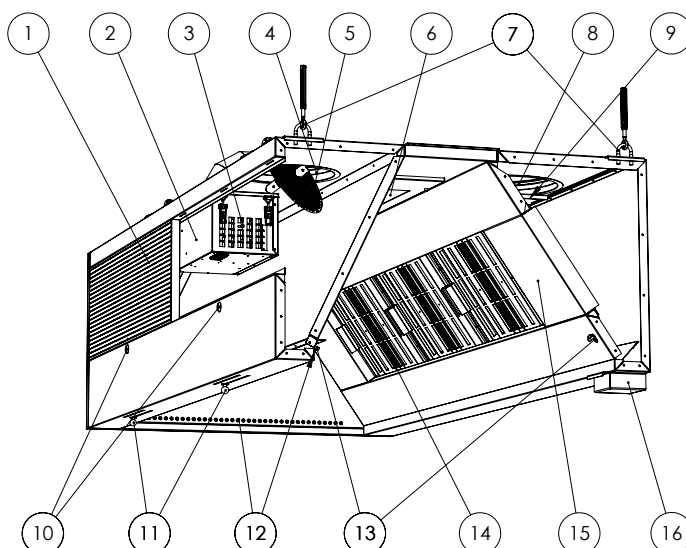
Supply air is replenished and balanced into the kitchen in two ways:

First, our "Turbo Grip" air curtain directs the greasy air rising up from the kitchen appliances into the canopy cavity and toward the grease filters. Second, supply air is delivered through perforations in the front plate, as well as through adjustable air vents on the bottom surface of the supply air module. .



## Construction and Dimensions

The canopy is made from 1 mm thick stainless steel (AISI 304, surface 2K). Duct connections are equipped with rubber gaskets, and supply air chambers are heat insulated to prevent condensation of steam on the inner surface of the canopy. Heavy duty U-bolts are installed on each top corner of the canopy for hanging. We at know that no two kitchens are exactly alike. We have designed our kitchen canopies to be modular, so we can custom design and manufacture a canopy solution to meet your each and every project requirement or technical need.



- 1- Front panel
- 2- Ozonator
- 3- Regulating damper
- 4- Supply air connection
- 5- Supply air regulating plate
- 6- Lighting
- 7- Suspension points
- 8- Exhaust air connection
- 9- Exhaust air regulating plate
- 10- Front panel lock
- 11- Auxiliary supply air openings
- 12- "Turbo Grip" air nozzle system
- 13- Airflow measuring nipples
- 14- HFK grease filters
- 15- Blind panel for grease filter rail
- 16- Grease collection container

## Lighting

Professional kitchens require functional lighting to ensure that employees have a safe and effective work environment. Our professional kitchen canopies use next generation, energy efficient LED lights, which can save as much as 50% more energy compared to older technology fluorescent lights.

Grease removal canopies include light fixtures integrated into their ceilings, protected by an aluminum and glass casing. Condensation canopies use surface mounted lighting, protected by a fiberglass-reinforced plastic casing. Their electrical protection class is IP66.

The size and number of light fixtures are determined by the size of the canopy, to ensure there is enough light output for the entire workspace.

## Luminaries

Canopy length (mm)	Marking	Light Fixture length (mm)	Energy use (W)	Light color	Color temperature (K)	Color rendering index (Ra)	Flux (lm)
$1000 \leq L < 1600$	LED770	769	20	840	4000	80	2250
$1600 \leq L < 1900$	LED1370	1369	37	840	4000	80	4900
$L \geq 1900$	LED1670	1669	53	840	4000	80	6750

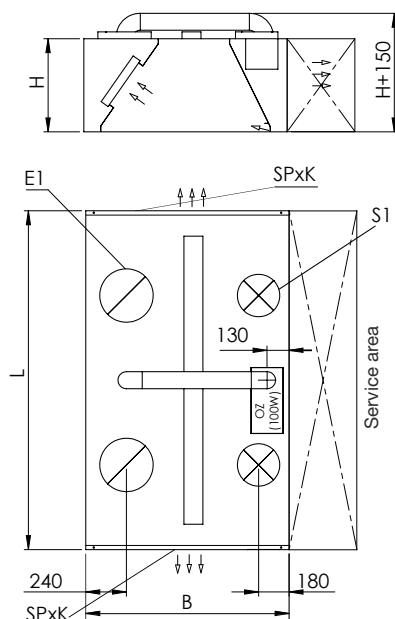
## Dimensions

### EEZ Dimensions, mm

L Length	600, 700, ..., 2800, 2900
B Width	900, 1000, ..., 1700, 1800 (1 part) 1800, 1900, ..., 3500, 3600 (2 parts)
H Height	400, 550, 400/550

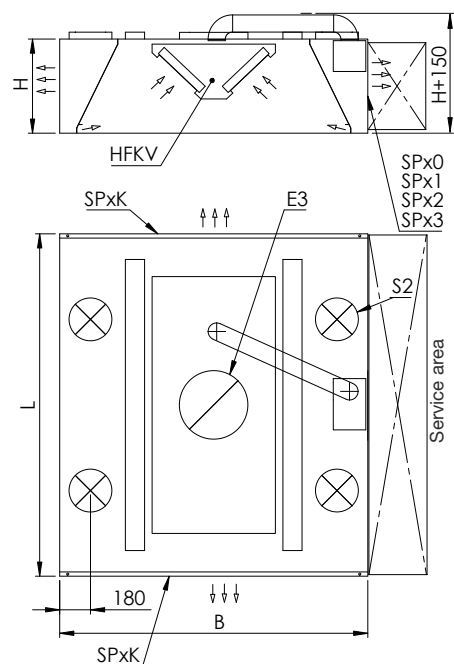
### EEZ-1 Wall installation, 1-part

L Length	600, 700, ..., 2800, 2900
B Width	B=900 (No lighting) B=1000, 1100, ..., 1800
H Height	400, 550
S0, S1	160, 200, 250
E1	200, 250, 315



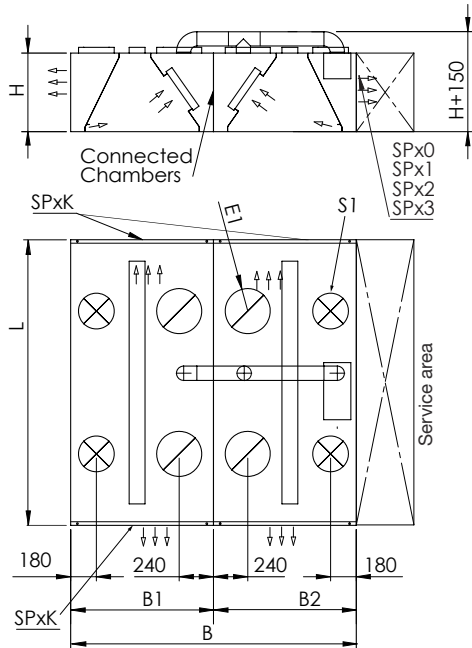
### EEZ-1 Island installation, 1-part (with HFKV modul)

L Length	600, 700, ..., 2800, 2900
B Width	B=1500 (No lighting) B=1600, 1700 (1 row of lights) B=1800, ..., 2900 (2 row of lights)
H Height	400, 550
S2	160, 200, 250
E3	200, 250, 315, 400 (HFKV modul)

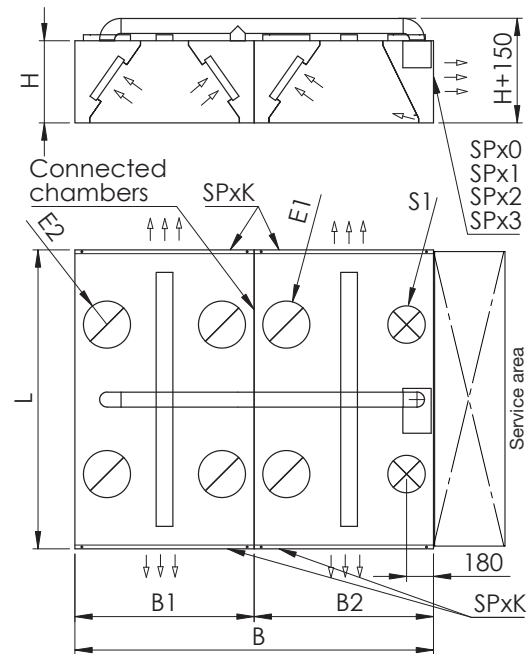
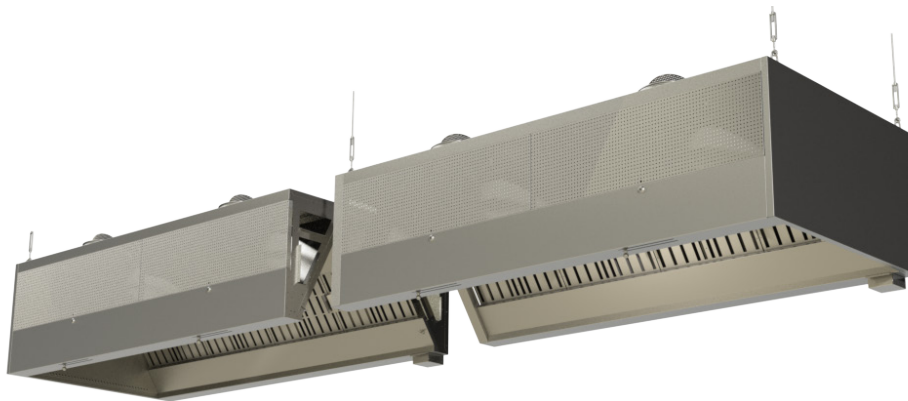


**EEZ-2 Island installation, 2-parts**

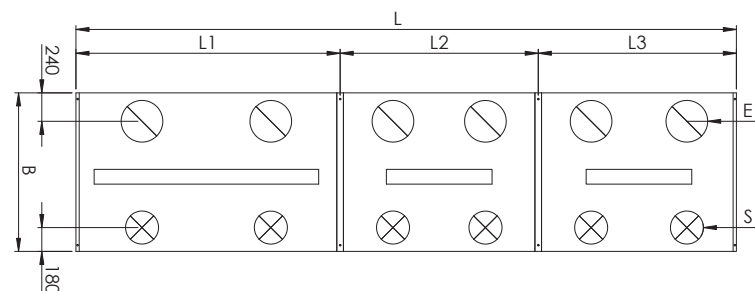
L Length	600, 700, ..., 2800, 2900
B Width	B=1800 (No lighting) B=1900 (1 row of lights) B=2000, 2200, ..., 3400, 3600
B1/B2 Width	900 (No lighting) 1000, 1100, ..., 1800
H Height	400, 550
S1	160, 200, 250
E1	200, 250, 315

**EEZ-2 Island installation, 2-parts**

L Length	600, 700, ..., 2800, 2900
B Width	B=1900 (No lighting) B=2000 (1 row of lights) B=2100, 2200, ..., 3500, 3600
B1/B2 Width	900 (No lighting) 1000, 1100, ..., 1800
H Height	400, 550
S1	160, 200, 250
E1, E2	200, 250, 315

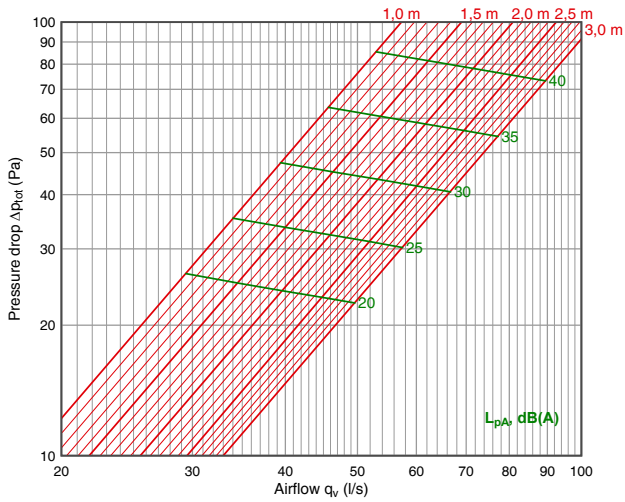
**Hood lengthening with modular sections**

Preferred length dimensions are 1000, 1500, 2000 mm

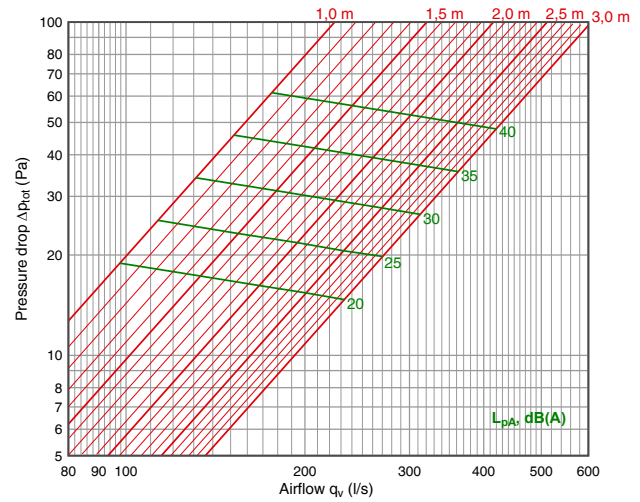


## Technical data

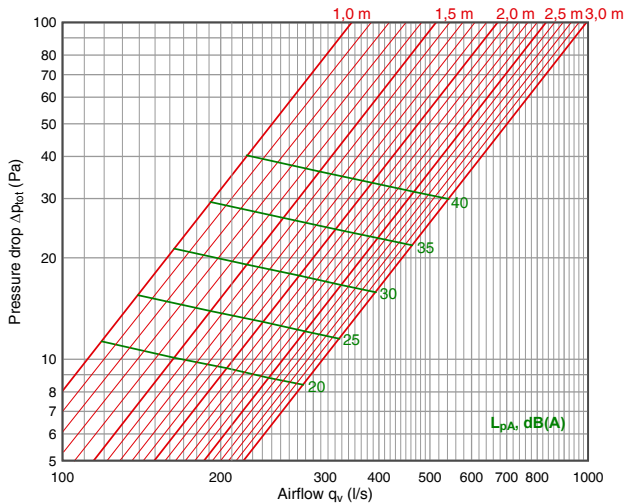
Supply air: "Turbo Grip"



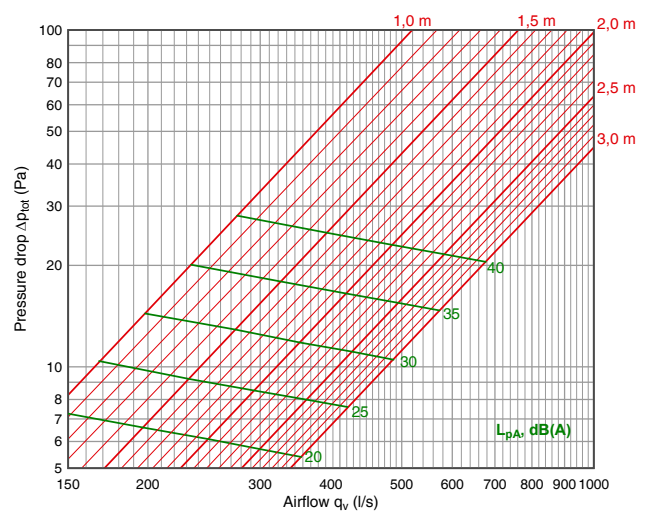
Supply air: SP1+"Turbo Grip"



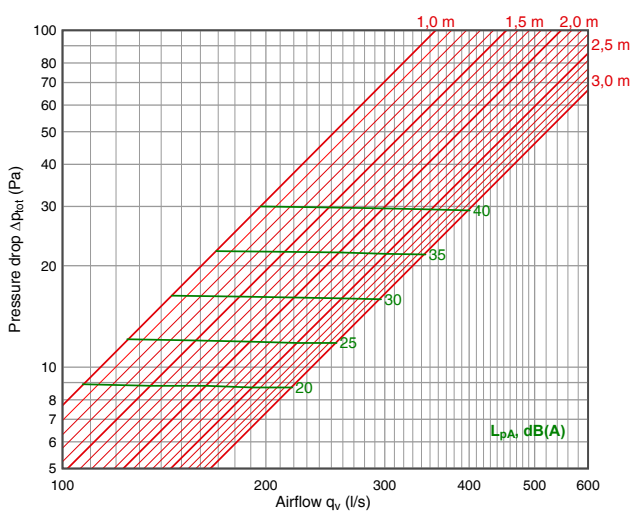
Supply air: SP2+"Turbo Grip"



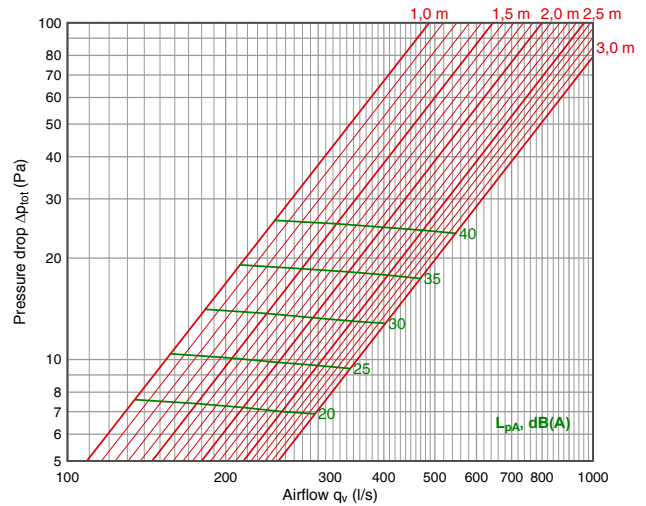
Supply air: SP3+"Turbo Grip"



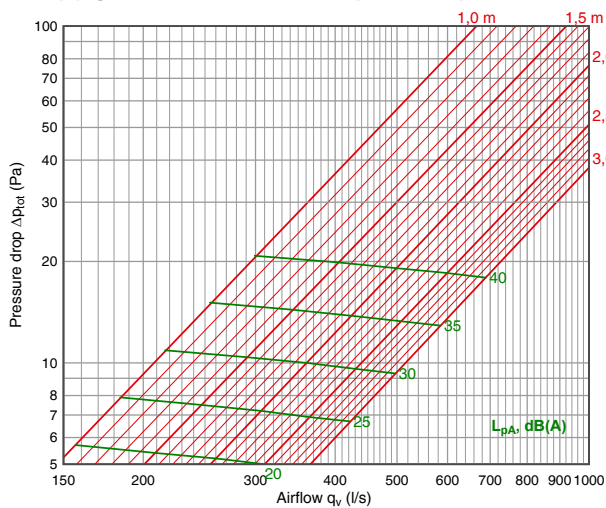
Supply air: SP1+"Turbo Grip"+side panels



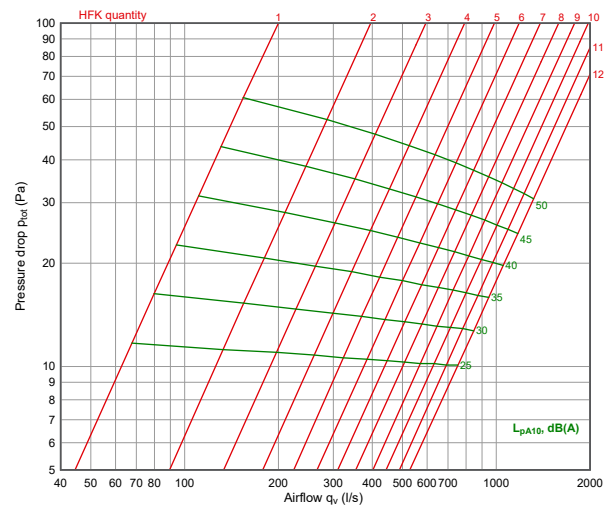
Supply air: SP2+"Turbo Grip"+side panels



Supply air: SP3+"Turbo Grip"+side panels



HFK -grease filter



### Acoustic data

Supply air	Correction of sound level $K_{okt}$ (dB)							
	(Hz)							
"Turbo Grip"	63	125	250	500	1000	2000	4000	8000
"Turbo Grip"	-6	-8	-5	-3	0	-1	-7	-20
SPx1 + "Turbo Grip"	-1	0	3	2	-1	-3	-11	-23
SPx2 + "Turbo Grip"	0	1	5	4	-1	-8	-20	-27
SPx3 + "Turbo Grip"	7	5	6	4	-2	-13	-21	-30
SPx1+"Turbo Grip"+side panels	-1	-1	2	2	0	-5	-15	-28
SPx2+"Turbo Grip"+side panels	3	1	5	4	-1	-9	-21	-27
SPx3+"Turbo Grip"+side panels	8	5	6	4	-3	-13	-22	-30
	$\pm 4$ dB	$\pm 4$ dB	$\pm 4$ dB	$\pm 2$ dB	$\pm 2$ dB	$\pm 2$ dB	$\pm 2$ dB	$\pm 2$ dB

### Facts about Ozone

Ozone is a colorless gas with a pungent smell that can often be detected by any person at a concentration of 0,02 ppm (0,4 mg/m<sup>3</sup>). The smell of ozone is similar to chlorine like in a swimming pool.

Local protection legislations must be followed when using ozone. In Sweden, for example, the Swedish Work Environment Authority issues the following hygienic limits for ozone:

- 0,1 ppm (during a working day, 8 hours)
- 0,3 ppm (during 15 minutes)

At acute exposure ozone can cause following injuries:

- On skin: Irritation and burning feeling
- In eyes: Severe irritation, burn injuries and reduced vision
- In lungs: Irritation to respiratory organs and breathing difficulty

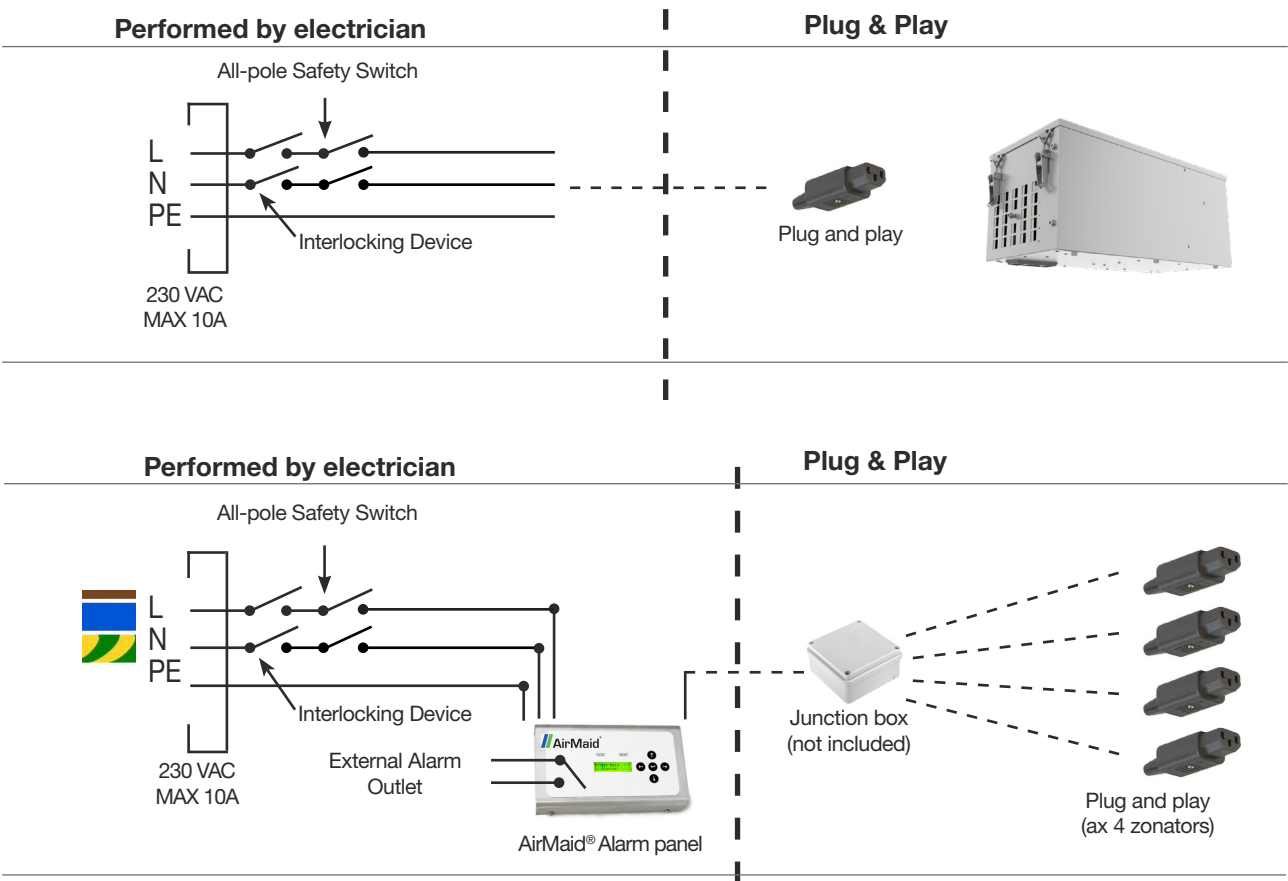
Always take corrective action and safety precautions if ozone is detected in an indoor environment.



Ozonator Electrical Connections

Ozonator installation must be performed by an authorized electrician and the installation must meet all national, regional and local standards and regulations. The interlock displayed in the graph below is mandatory and intended to cut off power to the ozonator when the exhaust fan is not functioning. An all-pole safety switch with a break length of at least 3 mm must be installed as well.

The ozonator requires 230 VAC / 50 Hz. Each alarm panel must be connected to its own slow 10A breaker.



## Product marking

Marking - Dimensions - Supply air - Exhaust air - Front panel - Grease filters - Lighting

### Marking

EEZ - 1 module in width  
EEZ - 2 - 2 modules in width

### Dimensions

L - Length  
B - Width  
H - Height

### Supply air

S0 - Supply air only for ozonator  
S1 - Supply air chamber on one side  
S2 - Supply air chambers on two sides  
Diameter of supply air connection  
Quantity of supply air connections

### Exhaust air

E1 - One exhaust air chamber  
E2 - Two exhaust air chambers  
E3 - HFKV exhaust air module  
E4 - HFK filters in dual row  
Diameter of exhaust air connection  
Quantity of exhaust air connections

### Front panel

SPx0 - No Perforation, only "Turbo Grip" supply air curtain system  
SPx1 - Perforation pattern 1 - (per L=1000mm) 130 l/s, 40 Pa, 40 dB(A)  
SPx2 - Perforation pattern 2 - (per L=1000mm) 190 l/s, 37 Pa, 40 dB(A)  
SPx3 - Perforation pattern 3 - (per L=1000mm) 250 l/s, 25 Pa, 40 dB(A)  
SPxK - Perforation pattern on L/R side panels - (SPxKL, SPxKR, SPxKLR)  
SPxF - No Perforation, fixed surface without access lock

### Grease filters

HFK  
Grease filter quantity

### Lighting

LED770 - L=769, 20W  
LED1370 - L=1369, 37W  
LED1670 - L=1669, 53W  
Quantity of lighting fixtures

**Example:** EEZ-2 3500x2400x550 - S1=250x8 - E1=315x4 - SPx3 - HFKx12 - LED1370x4

**Blind plates:** Blind plates are blank panels used to replace filters in cases of low air volumes. By using blind plates the canopy system can maintain sufficient pressure and air velocity for proper filter operation.

### Masking plates:

Mounted in the area between canopy and ceiling, when conduits and other components are to be concealed.